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# RESOURCES FOR SCHOOLS

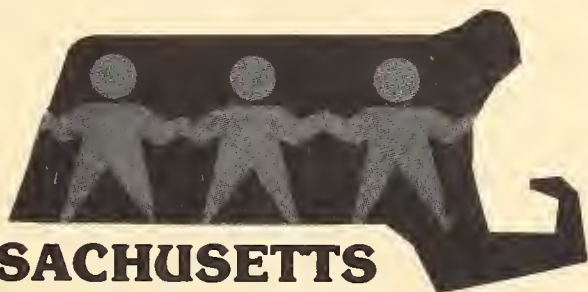
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## 8. A REVIEW OF MASSACHUSETTS STATEWIDE ASSESSMENT FINDINGS: A CURRICULUM INTERPRETATION OF THE MAJOR FINDINGS OF THE MASSACHUSETTS STATEWIDE ASSESSMENT PROGRAM



MASSACHUSETTS  
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FALL 1978

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# RESOURCES FOR SCHOOLS

## **8.** A REVIEW OF MASSACHUSETTS STATEWIDE ASSESSMENT FINDINGS: A CURRICULUM INTERPRETATION OF THE MAJOR FINDINGS OF THE MASSACHUSETTS STATEWIDE ASSESSMENT PROGRAM

By

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## PREFACE

Resources for Schools is a series of publications developed by the Massachusetts Dissemination Project (MDP) for Massachusetts educators, parents, and students. The project, funded by the National Institute of Education, has four major goals:

- to stimulate greater awareness of the resources available to Massachusetts schools,
- to provide educators, parents and students with specific information about resources and materials for school programs and services,
- to assist regional education centers and the Department to increase and improve information and dissemination services to educators, parents, and students in the state,
- to encourage greater exchange and sharing of resources among educational organizations, service providers, the Department of Education and its regional education centers, and school personnel.

The project is located in the Department's Boston office. In addition, each regional center has designated a staff member who maintains continuous contact and involvement with project activities across the state, and is responsible for working with center staff to improve information and dissemination services in the center. Ultimately, the regional centers will function as switchboards -- sometimes providing services directly to schools, other times connecting them with the many existing resources. The development of this series -- as its name suggests -- is one way the project is helping make these connections. *Please contact a member of the project staff for more information about the series, the project or the regional center nearest you.*

Resources for Schools presently available:

1. A Catalog of Publications from the Massachusetts Department of Education
2. Video Tapes for Teaching
3. A Guide to Dissemination Agencies
4. Community Involvement in Your School: A Guide to People, Programs and Publications
5. The Student's Guide to Special Education
6. Implementing Chapter 622: Exemplary Programs for Alleviating Racism and Sexism in Massachusetts Schools
7. Competency Programs for Basic Skills Improvement: A Resource Guide

Resources for Schools topics to look for in the future:

- . Special Education Teacher Training Resources
- . Student Rights and Responsibilities



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## INTRODUCTION

This publication summarizes the major findings of the Massachusetts statewide educational assessment and identifies some readily available instructional resources that can be brought to bear in the areas noted in the findings.

The assessment provides information on the performance of a random sampling of nine and seventeen year old students in major subject areas. It also provides information about consumer skills and knowledge and, for the older group, occupational and career attitudes and knowledge. Begun in Massachusetts in 1974, the assessment program is a continuing series of annual evaluations of the knowledge, understanding, skills, and attitudes of public school students. The tests do not compare students; rather the tests are designed to measure what students know and can do in a selected subject area. The tests are known as objective referenced tests and the results are reported in terms of the percentage of correct and incorrect responses.

Like the National Assessment of Educational Progress (NAEP), started in 1969, the Massachusetts assessment attempts to take stock of the progress of education by revealing the levels of attainment in basic curriculum areas of public school students in different age groups. This is the essential purpose of the assessments. But this information alone is not necessarily directly useful to the schools. Even the barest descriptive analysis indicates deficient levels of attainment in some areas. But then what? Are there instructional materials that might help to eradicate some of the cavities of ignorance in the classroom? A host of factors play a role; but the curriculum is a basic component in raising the level of attainment.

Many states have adopted assessment programs modelled to a great extent on the NAEP: but Massachusetts is the first state, as far as I know,



to relate the census-like data to explicit instructional material options.

This report is addressed to teachers and administrators to use as a discussion memorandum rather than as a prescriptive document. It is not a blueprint for change. Nor is it an endorsement of any instructional materials cited. Undoubtedly, there are more good programs available than are noted in this report. The instructional materials lists are not comprehensive; but they do suggest the qualities and diversities by which additional resources can be assessed. Leading publishers have materials to respond to different ability groupings (i.e. the very able student as well as the slower learner) although the listings of materials are not separated by ability grouping in this report. All materials noted are the most recent issues or revised editions. Complete addresses of all publishers and suppliers are given at the end of the report.

Each section begins with a commentary and is followed by a review of findings. A discussion of curriculum observations and their relationship to the findings comes next. Suggestions for curriculum materials come last.

A strong and healthy skepticism is desirable in reading this report. It is a first approximation, after all, and it does not reflect the dynamics and idiosyncracies of individual schools. Teachers and administrators must reflect these suggestions through their knowledge and experience.

HIGHLIGHTS OF THE STATEWIDE ASSESSMENT

1974 - 1977

- Nine year olds do extremely well in reading, mathematics and science compared to their national counterparts. Seventeen year olds do as well as or better than their national counterparts in reading, mathematics and social studies and less well in writing and science.
- Seventeen year olds are generally very distrustful of political leaders. Sixty-nine percent feel that "quite a few" political leaders are a "little bit crooked". And 44 percent feel that the government in Washington can be "trusted some of the time".
- Girls in both age groups perform poorer than boys in science, mathematics and social studies. They perform better than boys in reading and writing. The effects of sex-role stereotyping appear in the early elementary grades.
- Roughly 56 percent of the seventeen year olds have never had a science course with laboratory experiences.
- Much lack of knowledge about our political and economic systems exists among nine and seventeen year olds. More than a third of seventeen year olds have little or no idea of the fundamental differences between the United States and the USSR.
- A significant portion (roughly 25 percent overall) of the seventeen year olds appears to lack the knowledge and skill to solve relatively simple, everyday consumer problems. Only 39 percent correctly figured out a 6 percent sales tax on a \$60 bicycle. Slightly more than 50 percent were able to fill out a job application form correctly.
- Possibly as important as any of the assessment findings is this: most seventeen year olds report that school is "too easy". They feel they are not being challenged much.
- Positive ratings of school climate by students, teachers and administrators appear, by and large, to be independent of the kind of community in which the school is located.



- Less than half of the seventeen year olds are able to identify the kinds of academic programs and courses leading to specific jobs or careers. Career counsellors do make a difference. Students who discuss things with them are much better informed about career options than those who do not have these discussions.
- The least important goal in life of the seventeen year olds is to become a community leader. Their most important goal is to have a "good marriage and a happy family life". They may appear to be not especially acquisitive or ambitious; but it is not fair to assume that they are turned off. Simply, they do not seem to share the "work or starve" syndrome of many of their elders.
- With the exception of social studies, the performance of Massachusetts nine year olds either exceeds or is as high as that of their peers throughout the United States.
- Building principals can be the difference between an achieving school and a failing school. What he or she values most -- an emphasis on reading, for example -- often shows up in classroom results and academic achievement. This is the case for both elementary and high schools.
- Generally, seventeen year olds who work after school and on week-ends perform better in all subjects.
- There is no evidence in the assessment to link television advertising to poor consumer habits. Both nine and seventeen year olds are very skeptical about television advertising. Ninety percent of the nine year olds and 95 percent of the seventeen year olds believe this statement to be false: "Advertising on TV could never be wrong".

OCCUPATIONAL KNOWLEDGE AND ATTITUDESCOMMENTARY

Gerard Piel, publisher of Scientific American, wrote an article in the January 1978 issue of Educational Researcher in which he said, "It is the mission of our schools not to shape the citizen to the uses of society, but to nurture citizens capable of shaping society to better purposes". Hardly a month goes by without national media stories and editorials on how inadequately schools prepare students for employment and careers. The focus of many of these stories is not on creating superior educational opportunities so that young people might raise their career expectations, aptitudes and motivation; the focus is on training students to have certain minimal capacities to survive in minimal jobs in factories, on production lines, in typing pools, and the like.

One of the goals of education should not be to prepare, or to dump, young adults, with little knowledge and few skills, into lifelong semi-skilled jobs. Although they may spend their lives in second class, economic citizenship, the intellectual vacuities of many such jobs should not be the aim or the result of spending twelve years in formal education.

If our schools actually expect to nurture citizens capable of shaping society to better purposes, as Piel claims, then a readjustment of community values is the essential first step. Most schools reflect community values; they reflect and represent the underlying systems of belief. If parents have low expectations for their children, can schools be expected to eradicate them and substitute high expectations to create a heightened sense of career possibilities? Schools just can't do everything.

Nevertheless, the findings of this part of the Massachusetts assessment may be as important as any of the findings in the subject areas for .

they illuminate the enormity of the job facing everyone who hopes to give all public school students a better chance.

## FINDINGS

### Occupational Knowledge and Attitudes - Sex Differences

Many of the important professions and vocations are preferred equally by boys and girls. In equal numbers, girls would like to become architects, lawyers, doctors, reporters and photographers. The customary sex-role stereotypes seem to be non existent in the choice of professional and semi-professional fields.

The customary sex-role stereotypes, however, appear among the groups that aspire to skilled, semi-skilled and unskilled jobs. Girls want to be typists, social workers, travel agents, dance instructors and fashion designers. Boys want to be firefighters, carpenters, truck drivers and plumbers.

### Job Knowledge

Career counsellors do make a difference. Students who report they discuss things with career counsellors are much more informed about career options and they plan better on how to begin reaching their objectives. In short, counsellors provide a real service. The students with whom they come in contact know a lot more about careers and occupations than do the students whom they seldom or never meet.

Only 48 percent of the seventeen year olds are able to select the high school courses as well as the post-secondary education and training most appropriate, if not necessary, for certain kinds of jobs and professions.

Roughly one out of three students has little or no understanding of different job classifications and professions. This proportion doesn't know the difference between an architect and a draftsman, an ariplane mechanic and a mechanical engineer.



## Work Attitudes

Girls want to enter the professions less for the monetary rewards than to have opportunities to serve the public. Twenty-two percent of girls compared to eleven percent of boys feel it's much more important "to help solve social problems". More boys than girls report that their significant goals are to have "plenty of money" and "steady work and a stable income."

Many critics note the changing attitudes of young adults to work and employment; work, it is claimed, is subordinate to other interests and pursuits. Two-thirds of the students report that their most important job factor is that their work be "interesting". Less than 50 percent considered the opportunity for promotion and advancement. Only 12 percent report that they are able to put up with boring jobs.

Many vocational students seem to be followers, accepting authority without ever questioning it; and settling for less. Fifty-four percent of vocational students compared to 31 percent of college bound students report that it is important not "to stir things up" and "to keep their mouths shut" if they want to become successful. Seventy-five percent of vocational students compared to 63 percent of college bound students strongly feel that it's important "not to get into things that are over their heads". They won't take many risks.

## Occupational Knowledge - Background

The correlation between career expectations and social and economic backgrounds is clear. The job and career expectations of the seventeen year olds are as generally stratified as their backgrounds. Students in residential suburbs are more knowledgeable about, and have higher aspirations for, both careers and occupations than students in other kinds of communities. Students in large cities have the lowest expectations and the least knowledge about career and occupations.

## Life Goals

Depending on one's frame of reference, the seventeen year olds display a solid sense of values. The major goal among the majority of girls and boys is to have "a good marriage and a happy family life". Following are: "being successful in my work" and "having good friends." Their least important goal is "to become a community leader".

## CURRICULUM OBSERVATIONS

A number of cultural pressures and attitudes affect the occupational and career goals of students; and schools cannot address or resolve all of the problems. They influence--sometimes to a great extent--students' awareness of the opportunities for personal and professional growth. Sensitive schools and responsive teachers notably, may affect the achievement motivation of students in any school-community setting; and at times schools can help to overcome debilitating socio-economic backgrounds.

Ideally, the time to start making significant inroads on student awareness is during the elementary school years. Attitudes of teachers and administrators can have an overriding influence. Rich and rigorous curricula that cover the fundamentals while they simultaneously describe possibilities in later life; schools working with communities--these aspects of learning, and many more, do influence the direction of the lives of children and help to generate career aspirations. Possibly, by the time a student is in the junior year of high school, the mold is already set; the opportunities to create heightened vistas and career goals are limited.

Some publishers are promoting, and school systems devising, what they call "career-related mathematics", K-12. It is claimed by the developers that these programs relate the academic curriculum to "real world career opportunities". It is debatable whether these programs benefit students as

much as traditional mathematics programs, many of which do contain "real world mathematics".

It has been suggested that special courses be given in occupational knowledge; but many educators resist this notion. Some systems are developing interdisciplinary approaches for high school students. For example, English and occupational education departments work together to present career-oriented activities. There is a growing movement to link schools to industry, especially in trying to match the interests of graduates to the needs of industry. Work-study programs for high school students are receiving increasing attention.

There are many agencies and instructional materials that deal with sex-role stereotyping; and major publishers appear to have made much progress in developing bias-free curricula.

#### CURRICULUM MATERIALS

1. A number of resources are available to assist in addressing the problems of sexist stereotyping and in enlarging career possibilities for young girls and women. Some are:

Womens' Educational Equity Communications Network  
Far West Laboratory  
1855 Folsom Street  
San Francisco, California 94103

(This group provides information and materials on curricula and teacher training.)

- - - - -

Project on The Status and Education of Women  
Association of American Colleges  
1818 R Street, NW  
Washington, D.C. 20009

(This group is a clearinghouse of information and materials for schools as well as colleges.)

- - - - -

Resource Center on Sex Roles in Education  
National Foundation for the Improvement of Education  
1156 15th Street, NW  
Washington, D.C. 20005

- - - - -



Project on Work in Technology and Science  
Room 200-228  
Massachusetts Institute of Technology  
Cambridge, Massachusetts 02139

(This project sponsors programs for junior high and secondary teachers and counsellors to encourage women to consider careers in science and engineering.)

- - - - -

Engineers' Council for Professional Development  
345 East 47th Street  
New York, New York 10017

(Provides information on career opportunities for women in seventeen different fields of engineering.)

- - - - -

The following books and reports are available:

Issues of Sex Bias and Sex Fairness in Career Interest Measurement

E. Diamond, Editor  
Career Education Program  
Department of Health, Education and Welfare  
Washington, D.C. 20208

Report on Sex Bias in the Public Schools

National Organization of Women  
28 East 56th Street  
New York, New York 10022

The Process of Change: A Handbook for Teachers on the Concept of Changing Sex Role Stereotypes

Far West Laboratory  
1855 Folsom Street  
San Francisco, California 94103

2. The following organizations provide assistance in occupational education:

Triple E Resource Center  
Education Collaborative of  
Greater Boston (EdCo)  
20 Kent Street  
Brookline, MA 02146

Experienced-Based Career Education  
Research for Better Schools  
1700 Market Street  
Philadelphia, PA 19103

Skills Bank Network  
Northeast Regional Education Center  
1551 Osgood Street  
North Andover, MA 01845

The Tri-Lateral Council  
125 High Street  
Boston, MA 02110

Massachusetts Occupational Information  
System  
60 William Street  
Wellesley Hills, MA 02181

The Education Cooperative  
c/o Memorial School  
Eliot Street  
South Natick, MA 01760

Massachusetts Diffusion Assistance  
Project  
290 South Main Street  
Andover, MA 01810

3. The Division of Occupational Education, Massachusetts Department of Education, publishes a quarterly newsletter about programs, reports, and conferences, for individuals involved with career guidance.

Careergram  
Career Guidance Specialist  
Division of Occupational Education  
Department of Education  
31 St. James Avenue  
Boston, MA 02116

4. The roadblocks to achieving more equitable career aspirations for young girls and young women are enormous. Expert assistance is essential. Everyone charged with educational responsibilities can help to remove some of the roadblocks. In the elementary grades, the curriculum does play a role, if not a significant one, in encouraging girls to aspire to careers in science. Previous research in Massachusetts\* indicates that girls have attitudes toward science as positive as those of boys when instructional materials that encourage individual experimentation are used. Some of these programs are noted in the science section of this report; three programs are noted here:

Elementary Science Study, published by these companies:  
McGraw Hill, American Science &  
Engineering, and Selective Educational  
Equipment

Science Curriculum Improvement Study, published by Rand McNally,  
Selective Educational Equip-  
ment and American Science &  
Engineering

Science: A Process Approach, published by Xerox

---

\* Something of Value, Dean K. Whitle and Dan C. Pinck, Office of Instructional Research and Evaluation, Harvard University, 1973.

By encouraging classroom discussions about sex-role stereotypes in science and by offering programs that allow individual experimentation, teachers can help to offset the traditional view questioning the ability of girls to do science, as well as the propriety of their being scientists. And, in the later school years, counselling can be especially important in advising girls that three years of mathematics, for example, are needed in the secondary years.

5. The Department of Education's Student Service Centers, a student-initiated project, provide a variety of services, including a newsletter and topic files on issues relating to careers and occupational education.

Bureau of Student Services  
Massachusetts Department of Education  
31 St. James Avenue  
Boston, MA 02116



### III

#### CONSUMER SKILLS AND VALUES

##### COMMENTARY

Perhaps it is asking too much to encourage young persons to be more discriminating -- to be less susceptible to advertising -- when adults are not. Almost everyone is assaulted daily by urgent, anxious messages in the media to buy, buy, buy. Instant gratification is the order of the day. Yearly and seasonal changeovers in cars, clothes, hi-fis, and a myriad of other things help to create an acquisitive society. Marketing and advertising are relentless allies, often skirting the edge of truth. Even attempts at self-policing by business fail to limit the number of meretricious statements and do not dispell the disingenuous logic behind them. Even when the federal government demands a small-type notation on the label implying that a product may injure one's health, there is still a great army of buyers, among young and old.

Today, many students can afford to buy cars as well as other expensive things on credit. This part of the Massachusetts assessment suggests that the majority of students are highly skeptical about advertising claims; but, nevertheless, they seem to be trapped, as we all are, in the race to acquire things, perhaps regardless of value and need.

Students in both age groups, the nine year olds and the seventeen year olds, indicate that they possess a certain sense of discrimination and that they have a fair knowledge of what's good for them. However, their consumer values may exceed their consumer skills; and what may be the principle lack is an adequate knowledge of the simple arithmetic required to find out exactly how much they ought to be charged for particular items. In this

sense, in particular, mathematics becomes a critical skill. But it should be accompanied by highly developed critical thinking.

What role do schools have? Can schools teach critical thinking to the extent that most students can analyze all advertising statements and can separate inferences and assumptions from facts? Can schools repair whatever deficiencies exist in the area of consumer skills and values? The larger problem is where should consumer education fit into the school curriculum? Since there's little evidence of higher performance by students in schools that offer consumer education programs, perhaps a greater concentration of effort should be made in the basic subjects.

## FINDINGS

### Consumer Knowledge - Television

It is difficult, if not impossible, to obtain accurate conclusions about television's role in consumer knowledge; but most critics believe that television does extend the range of what's wanted and of what's bought. There is no evidence in the assessment that definitely links television advertising to poor consumer practices. The connection may be there; but the assessment doesn't uncover it. Both age groups are far from gullible. Ninety percent of the nine year olds and 95 percent of the seventeen year olds know this statement is false: "Advertising on television could never be wrong."

However, and even more importantly, the assessment found consistent correlations between the time spent watching television news (and other programs) and student performance in all of the consumer education content areas. Students who spent the most time watching television news performed better on the test of consumer skills and values. Students who were more attracted by advertisements and comics in the newspapers did less well than students who

were more interested in new stories.

### Consumer Knowledge - The Basics

Consumer awareness or sophistication is greatly dependent on basic skills in mathematics, English and history. It stands to reason that any student who doesn't know how to figure percentages; how to read a graph; how to multiply, divide, add and subtract; how to comprehend what he or she has read--is likely to become a poor consumer.

Use of simple mathematics was required in two questions asked of the seventeen year olds:

- "You were given a 10% discount on a \$50.00 bicycle, how much did you pay for the bicycle?"  
(Only 66 percent knew the correct answer.)
- "You go into the store to buy a \$60.00 radio and the sales tax is 6%. What is the total cost of the radio?"  
(Only 39 percent knew the correct answer.)

A limited vocabulary affects one's consumerism: 37 percent of the seventeen year olds did not know the meaning of loophole; and 43 percent did not know the meaning of embargo. Twenty-five percent of the seventeen year olds did not know that the Internal Revenue Service collects taxes.

Can high school students buy a car without being gypped? Or are they going to be fleeced? Sixty-three percent report that a private finance company is the most expensive place from which to borrow money. But 37 percent report the most expensive place is the local bank -- or the federal government.

### Consumer Knowledge - Sex Differences

Generally, there's an insignificant difference between girls' and



boys' scores in consumer knowledge and skills. However, in planning and budgeting, girls are far more aware and adept (roughly a twenty point difference separates them). Girls are better able to plan for effective decision making and are generally more accurate in their practical work and more insightful in their conceptual thinking.

#### Consumer Knowledge - Background

Students in higher income families display a better knowledge of consumerism than do students in families with moderate and low incomes. This merely confirms that students in higher income families have more opportunities to become familiar with consumer activities.

#### CURRICULUM OBSERVATIONS

It is debatable whether separate courses in consumerism should be advocated. Supplementary materials are available that can be taught along with other subjects. And, in mathematics and social studies, materials exist that impart considerable knowledge and information about consumerism. In addition, many biology programs contain much information about good habits in nutrition.

Since the school curriculum is already so fractionated, perhaps the more educationally sound policy would be to integrate the teaching of consumer skills into the teaching of the basic subjects. For example, if 61 percent of the seventeen year olds do not know how to compute a sales tax on an item to determine its total cost, then the way to correct this lies not in a course in consumerism or consumer math, but rather in using mathematics materials in basic courses which teach such simple operations.

## CURRICULUM MATERIALS

### Instructional Materials Suggestions

1. These mathematics programs provide the necessary insights and skills to be able to do "consumer math" problems. The exercises and analogies in them cover a range of consumer problems and situations. These materials have been selected from the list of materials in the mathematics section of this report.

#### K - 8

Mathematics Around Us  
Scott, Foresman and Company

Growth in Mathematics  
Harcourt Brace Jovanovich

Mathematics for Mastery  
Silver Burdett Company

Laidlaw Mathematics  
Laidlaw Brothers

Holt School Mathematics  
Holt, Rinehart and Winston

Mathematics  
Houghton Mifflin Company

Real Math  
Open Court Publishing Co.

Investigating School Mathematics  
Addison Wesley

Individualized Math System  
Ginn and Company

Field Mathematics Program  
Prentice-Hall

#### Junior High

Modern School Mathematics  
Houghton Mifflin Company

Holt School Mathematics  
Holt, Rinehart and Winston

Mathematics for Mastery  
Silver Burdett Company

Mathematics  
Addison Wesley

#### High School (essentially remedial programs)

Individualized Computational Skills Program  
Houghton Mifflin Company

Applications in Mathematics  
Scott, Foresman and Company

Consumer Mathematics  
Silver Burdett

Economics for Young Adults  
Sadlier/Oxford

Arithmetic: Without Trumpets  
or Drums  
Allyn and Bacon

2. The following publications illustrate the kinds of resources available from ERIC Document Reproduction Service, P.O. Box 190, Arlington, Virginia 22210:

A Guide to Free and Inexpensive Consumer Education Resources  
ERIC # ED 130 949

Lists 45 teaching units in 20 subject categories, from money management and consumer protection to food and health.

Curriculum Materials in Consumer Education, Volumes I-IV  
ERIC # ED 129 577

Particularly useful in utilizing case studies to illustrate consumerism.

3. The Institute for Educational Services, Inc. publishes the following:

Consumer Education  
# MG 000 204  
Institute for Educational Services, Inc.  
The Merrimack Education Center  
101 Mill Road  
Chelmsford, Massachusetts 01824

(A model of an interdisciplinary K-12 curriculum approach to consumer education processes.)

4. Joint Council in Economics Education  
Lincoln Filene Center  
Tufts University  
Medford, Massachusetts 02155



## IV

### SCHOOL CLIMATE

#### COMMENTARY

When you visit a school for the first time, you are likely to form your own opinions about that school, and how it operates. You may feel that the school is orderly and quiet, and that students and teachers show a serious interest in learning. Or, you may feel that the school is disorderly and noisy, and that no one shows much interest in learning. In stating these opinions, you would be judging the "climate" of the school; you would be saying how you feel about the school, and how it operates.

In 1976-77 students, teachers, administrators, and support staff in twenty-four randomly selected Massachusetts high schools were asked to rate the climate of their schools. The questionnaires developed for the study asked them to rate thirteen characteristics of their schools, such as the sense of community, the amount of challenge to students, and the degree of order in the school. These characteristics are important in themselves, and they are related to student learning.

#### FINDINGS

##### School Climate - Kind of Community

The results show that high schools are unique: their differences in climate are greater than their similarities. Some city, suburban, and rural schools are rated high for example, where others are rated average or low. Some schools are rated disorderly and noisy, where others are rated orderly and serious. Some schools are seen as challenging, where others are seen as easy or monotonous. In some schools learning is most important, where in others rote memory for course grades is held more important than what is learned.

## School Climate - Size/Organization

Smaller schools are rated better than larger schools regarding friendship and mutual support among school members, and the extent to which students are challenged. Schools with rotating weekly schedules are perceived as better organized, more purposeful, and allow for more student expression and influence. Schools with open campuses, however, are seen as less capable of dealing with problems as they arise.

## CURRICULUM OBSERVATIONS

During 1977-78 teams of students, teachers, and administrators in six volunteer schools were assisted in studying the climate of their schools. They gave the climate questionnaires developed in the 1976-77 study to members of their schools, and analyzed and interpreted the results. Based on their findings they made recommendations for the improvement of the climate of their schools:

1. In one school the teachers rated the challenge presented to students very low. They felt that course work was too easy, and that most students were given a "B" grade for work that several years ago would have received a "C". They felt that the school had insufficient graduation requirements, which encouraged students to take a minimum number of courses, and "easy" courses. Their recommendation was to increase graduation requirements, give more credit for "hard" courses, distribute course grades more according to merit, and upgrade the program of career exploration.
2. In another school the students rated the teachers low on availability for extra help, where the teachers rated themselves high on this factor. The problem was attributed to the bus schedule in this town in which most students rode

the bus. Almost all students took the early bus which left ten minutes after the last class. Students did not take the late bus as it involved an hour-and-a-half wait. Thus, students would scramble to see teachers within the ten minutes before the early bus, and only a few could be seen within that time. The students who were continually frustrated rated the teachers low on availability, when in actuality teachers were willing to work with students after school if they would stay. The solution was to move the late bus schedule up so that more students would stay after school for extra help.

Next year these six schools will be making the improvements recommended in their study of school climate. Other schools will be encouraged to visit these schools, and to undertake a study of their own school climate. The questionnaires and procedures developed in these two years are available to schools for this purpose on a continuing basis.



MATHEMATICSCOMMENTARY

To a large extent, instructional materials, especially in the earliest grades, are increasingly discarding many of the characteristics of the "new math" that came on like a steamroller in the 1960s. The heavy, pretentious terminology is either changing or completely discarded, along with the hybrid texts that evidently tried to capitalize on both markets, the modern and traditional. The technical jargon of the pure mathematician seems to be on the way out; traditional mathematics, using plain English, appears to be on the way in. Instead of trying to learn about open sets and closed sets and to define the difference between closed and open curves and closed and open regions, texts of many major publishers now present mathematics in its traditional form.

FINDINGSMathematics - Basic Skills

Ordinary computational skills are necessary to survive, to handle everyday-life problems; they are also necessary to handle physics, biology and chemistry as well as other academic subjects. Some examples taken from the assessment:

- Seventeen percent of the nine year olds could not add correctly 38 plus 19. And only 26 percent could multiply 9 times 38
- Only 54 percent of the nine year olds were able to recognize parallel lines
- Nineteen percent of the nine year olds could not correctly multiply 3 times 0

## Mathematics - Applied Skills

The assessment also revealed a distressing inability of students in both age groups to apply mathematics to everyday situations. Some examples taken from the assessment:

- Only 57 percent of the seventeen year olds answered the following question correctly:

"A gallon of paint will cover about 250 square feet of surface area. This paint is sold in gallon cans only. How many gallon cans are needed to paint a driveway 48 feet long and ten feet wide?"

- Only 48 percent of the seventeen year olds could answer this "real life" problem correctly:

"A parking lot charges 35 cents for the first hour and 25 cents for each additional hour or fraction of an hour. For a car parked from 10:45 in the morning until 3:05 in the afternoon, how much money should be charged?"

- Seventeen year olds should know the number of ounces in a pound; be able to convert pounds to ounces; know that the price divided by ounces equals the unit price. Yet only 30 percent answered the following question correctly;

A housewife will pay the lowest price per ounce for rice if she buys it at the store which offers:

12 ounces for 40 cents

14 ounces for 45 cents

1 pound, 12 ounces for 85 cents

2 pounds for 99 cents

(This is a perhaps minor example of the pervasive extent of sex-role stereotyping, since it reveals the attitude that women--housewives--do all the shopping.)

### Mathematics - Sex Differences

At age nine, girls did better than boys in mathematics--a great deal better, in fact. Girls performed better on 75 percent of the items.

But sex role stereotyping pervades their later experiences in mathematics, as it does in science. With the exception of arithmetic computation, seventeen year old girls performed poorer than boys. The effect of sex-role stereotyping by society begins in the upper elementary grades to limit or lower girls' career expectations for careers requiring strong mathematical or scientific backgrounds.

### Mathematics Skills - Student Employment

Seventeen year olds who work after school in part-time paying jobs generally perform better on the mathematics assessment than students who do not work.

### Mathematics - National Comparisons

Massachusetts nine year olds scored as well or better than the national sample on 75 percent of the identical questions. Seventeen year olds scored as well or better on 77 percent of the identical questions.

### Mathematics - Educational Programs

Predictably, there is generally a large difference in performance between seventeen year olds in college bound programs and students in general and vocational education programs. The variable with the greatest influence on above average performance is whether the student plans to go to college. The variable most closely associated with below average performance is enrollment in a general education program.



One area in which the difference is not so large is in estimation and measurement. However, in functions, the college bound students out-performed students in general and vocational program by close to forty points. It is assumed that generally only students in college bound programs receive the exposure necessary to answer these kinds of questions.

#### Mathematics - Consumer Skills

Seventeen year olds are extremely weak in business and consumer mathematics which deals with practical problems, including day-to-day purchasing and household management and involves such skills as calculating commissions, discounts and interest on loans; figuring out tax assessments; and comparative grocery shopping. In fact, the median performance score for this content domain was 43 percent compared to the median performance score of all domains which was 62 percent. Girls performed less well than boys on all five questions concerning business and consumer mathematics. College bound students performed better than other students on every question. (Nine year olds were not included in business and consumer mathematics.)

#### CURRICULUM OBSERVATIONS

Despite the increasing public and educational focus on returning to the "basics," a review of instructional options in mathematics, strongly indicates that the "basics" are covered thoroughly in many excellent programs. Possibly in better ways than they were forty or fifty years ago. In addition, there are probably more varied offerings now--programs designed to respond to high ability, middle range, and average or below average students--than ever existed. Therefore, returning to the basics in mathematics does not mean that

different materials are needed (they are readily available), but rather that they be used. In the better programs, there is a rich mixture of formalism and application; and even some of the components of modern mathematics are presented with clarity.

Some of the better mathematics programs and texts help to solve or diminish problems in other school subjects, such as social studies, science and consumer education. In concrete ways, some of the programs listed here directly address these complementary concerns.

The instructional materials noted here can help to redress some of the more obvious and disturbing trends revealed in the assessment.

These mathematics materials:

- stress basic computational skills;
- apply mathematics to everyday problems and situations, in and out of school;
- respond to varying needs, including those of the slow learner;
- stress drill along with understanding;
- avoid sex-role stereotyping in written examples and illustrations;
- represent third and fourth text revisions, based on wide use in schools throughout the United States and Great Britain.

### CURRICULUM MATERIALS

#### K-8

Mathematics  
Houghton Mifflin Company

Mathematics Around Us  
Scott, Foresman and Company

MacMillan Mathematics Series M  
MacMillan Publishing Company

Laidlaw Mathematics  
Laidlaw Brothers

Nuffield Mathematics  
John Wiley & Sons, Inc.

Project Mathematics  
Winston Press

Holt School Mathematics  
Holt, Rinehart and Winston

Mathematics for Mastery  
Silver Burdett Company

Growth in Mathematics  
Harcourt Brace Jovanovich

Investigating School Mathematics  
Addison Wesley

Real Math  
Open Court

New Ways in Numbers  
D.C. Heath

Other suggested materials, including games, physical objects, and enrichment units are available from these publishers:

Selective Educational Equipment, Inc.

Cuisenaire Company of America, Inc.

Creative Publications

### Junior High

Mathematics  
Houghton Mifflin Company

Holt School Mathematics  
Holt Rinehart and Winston

Mathematics  
Scott, Foresman and Company

Mathematics  
Silver Burdett Company

Nuffield Mathematics  
John Wiley & Sons, Inc.

Intermediate Algebra  
W.W. Norton Company

Mathematics  
Addison Wesley

Mathematics  
Educator's Publishing Service

### High School

Mathematics  
Holt, Rinehart and Winston

Mathematics  
Houghton Mifflin Company

Mathematics  
W.H. Freeman and Company

Mathematics  
The Independent School Press

Mathematics  
Science Research Associates

Note: Edith H. Luchins, professor of mathematics at Rensselaer Polytechnic Institute, Troy, N.Y. 12181, has completed a study on women and mathematics, sponsored by the National Science Foundation. Ms. Luchins is a source of information on activities to help eradicate or lessen the effects of sex-role



stereotyping, from elementary school through university. Other sources are:

Mathematics for Girls Project  
Lawrence Hall of Science  
University of California at Berkeley

The Boundless Resource  
Willard Wirtz  
The New Republic Book Company

The Psychology of Sex Differences  
Eleanor Maccoby and Carol Jacklin  
Stanford University Press

READINGCOMMENTARY

Learning to read is a process which is complex and subtle. Over the years methods have changed. The alphabetic method was followed by the phonic method which was followed by a form of structural linguistics. During recent years there has been a great deal of research and more public concern about reading than about anything else that happens in school. The subject of reading is the cause of great debate reflected in the title of Jeanne Chall's book, Learning to Read, The Great Debate. The findings of the Massachusetts assessment will not resolve the debate. But, some of the findings provide critical insights into why some schools are more successful than others at teaching reading.

At all levels the ability to read is more than being able to recognize words. It is also the capacity to respond imaginatively and with feeling to the experiences books can give. The essence of teaching reading, therefore, is to create the need and the desire to read; attention must be paid to this at all educational levels.

FINDINGSReading - Principals' Attitudes

The school principals do make a difference. In fact, they can be the difference between an achieving school and a failing school. A clear, definite and consistent course of action by the principal can make the

significant difference.\*

The assessment revealed that when a principal noted his or her determination to stress reading in the school -- stressed by the school as a whole, in preference to other choices -- the students in that school show better performance. This is the case for both elementary and high schools; it is especially so for high schools. When the reading objective is rated by the principal as "central", there is often a large difference (thirteen points and more) in student performance from schools in which the reading objective is not stressed, but rather is rated "peripheral".

#### Reading - Sex Difference

Sex makes more of a difference in the younger group, where girls show more reading proficiency on 20 of the 22 items, than in the older group where they score better than the boys on 25 out of 36 items. This kind of difference is a finding common to the research on sex differences in reading. The gap between the sexes decreases with age.

#### Reading - Background

Seventeen year olds who plan to matriculate in four-year colleges and universities and whose parents attended college exceed the performance of students who have different educational expectations and whose parents did not attend college.

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\* One of the more noteworthy and sensitive confirmations of the principal's role is a research project, started in 1973 and supported by the Carnegie Corporation of New York, under the direction of Ronald Edmonds of Harvard's Graduate School of Education. His study confirms that an effective principal can be one on the major factors in reading performance. The title of the project is "Search for Effective Schools: The Identification and Analysis of City Schools That Are Instructionally Effective for Poor Children."



## Reading Skills - Kind of Community

Students in both age groups who live in residential suburbs perform better in reading than students who live in urban areas, small towns, or industrial suburbs.

## Reading - National Comparisons

Massachusetts nine year olds exceed the performance of their peers nationally. Though the seventeen year olds perform above average, they do not achieve as well as the nine year olds in comparison with national samples.

## CURRICULUM OBSERVATIONS

Many causes of the alleged decline in reading have been suggested; and some observers will quickly state that a solution lies in returning to the "basics." But the Massachusetts assessment reveals that nine year olds are doing well, and a review of instructional materials indicates that the basics seem to be covered well. The problem areas occur possibly in abundance after the fourth grade.

Recently, there is a greater emphasis on the teaching of reading in the upper elementary grades as evidenced by increased purchases of basal reading materials. In fact, in the immediate future, there should be a demonstrated improvement in the reading skills of young adults resulting from the use of these materials.

In the high school, students who read poorly do need special assistance. For these students to be able to catch up, "second chance" reading instruction is a necessity; several major publishers now have programs available to help do this. The better programs help to correct or repair some of the reading skills deficits by making a concerted effort to

teach interpretive and evaluative comprehension skills, not just skills of literal comprehension.

Materials are available that directly address some of the problem areas revealed by the assessment. Since there is no single best way of teaching children to read, care should be taken in selecting materials.

### CURRICULUM MATERIALS

#### K-8

Holt Basic Reading System  
Holt Rinehart and Winston

Ginn Reading Series  
Ginn and Company

Open Court Basic Readers  
Open Court Publishing Company

Houghton Mifflin Reading Series  
Houghton Mifflin Company

The following supplementary materials are available:

Books and Pamphlets  
Addison Wesley

Specific Skills Series  
Barnwell Left Inc.

Supplementary Materials  
Teaching Resources, Inc.

Multiple Skill Series  
Levell and Lynwood Ltd.

Discovering Phonics We Use  
Rand McNally

Ladybird Key Words Reading Scheme  
Merry Thoughts

Books for classrooms and libraries are available from these publishers:

Four Winds Press

Doubleday & Company

General Books for Young Readers  
Harcourt Brace

Viking Junior Books

G.P. Putnam's Sons

Books for Children  
Collins-World

Fiction for Feminists  
(Ages 8-12 and up)  
The Seabury Press

Books for Young Readers  
Alfred A. Knopf, Inc.

Books for Children and Young People  
Lothrop, Lee & Shepart Company

Harvey House books for Children

Atheneum Books for Children

Books for Young People  
S.G. Phillips

Farrar, Straus and Giroux

Books for Boys and Girls

Houghton Mifflin Company

Note: Inside the Primary School, by John Blackie, published by Her Majesty's Stationery Office, London, is an excellent book for teachers of young children. Also: Equipment and Supplies, Association for Childhood International, Washington, D.C., How Children Fail and The Underachieving School, by John Holt (paperback, in many book shops), and Intellectual Growth in Young Children, by Susan Isaacs, Routledge & Kegan Paul, 68-74 Carter Lane, London E.C. 4, England. Varied reports and suggestions are also available from the Right-to-Read Office, Room 2131, 400 Maryland Avenue, SW, Washington, D.C. 20202. The ERIC Clearinghouse on Reading and Communications Skills, Urbana, Illinois, published this report: "Effective Reading Programs; Summaries of 222 Selected Programs." (LB1050.u56/1975)

#### Junior and Senior High School

"Catch-up" reading programs are available from these publishers:

Ginn and Company

Holt Rinehart and Winston

Silber Burdett

Science Research Associates

Prentice-Hall

Macmillan



## VII

### SOCIAL STUDIES

#### COMMENTARY

Both the national and Massachusetts assessments reveal large deficits in knowledge and understanding about American history and government at all levels -- national, state and local. The Massachusetts assessment suggests that large numbers of seventeen year olds neither care about nor hope to improve or change the system -- whatever it is. Everyone should be greatly concerned that only 63 percent of the seventeen year olds know that the organization of industry is based on government ownership and control in Russia and not in the United States; and that 61 percent of the nine year olds believe that the police can come into your house at any time.

#### FINDINGS

##### Social Studies - Attitudes

Skepticism, if not cynicism, is an indication of critical thinking. Not surprisingly, seventeen year olds who consider themselves skeptical performed better overall in this part of the assessment. These are some of the findings about seventeen year olds' attitudes about government and politics:

- Forty-four percent feel that the government in Washington can be "trusted some of the time".
- Sixty-nine percent feel that "quite a few" leaders are a "little bit crooked".
- Forty-five percent feel that government is run for the "benefit of a few big interests" and 50 percent feel that government is run for the "benefit of the people".

### Social Studies - Sex Differences

The consistently poor performance of girls in both age groups is alarming. On some questions for the older group, the performance of girls was 30 percent below that of boys. Even in elementary school, girls performed poorer than boys.

High school girls showed less knowledge than boys in history, economics, and geography, and in such basic technical skills as reading latitude and longitude on a map.

Why girls consistently performed poorer is a puzzle and a paradox. Valuable insights into the differences in achievement between males and females can be gained by reading The Psychology of Sex Differences by Maccoby and Jacklin, Stanford University Press, 1974.

### Social Studies - National Comparisons

In comparison with the national sample, the nine year olds scored as well or better on 68 percent of the same items. The seventeen year olds scored as well or better on 60 percent of the items. Massachusetts students in both age groups performed poorer in comparison to the Northeast sample.

### Social Studies - Problem Areas

There are some surprising gaps in the knowledge of both nine and seventeen year olds. Twenty-five percent of nine year olds think that a city's health department spends its time putting out fires. One out of three nine year olds reports that the Mississippi River is not in the United States and a like proportion reports that Africa is north of Europe. A third of them do not know the occupations of their parents. Fifty six percent of seventeen year olds do not know what a monopoly is and 35 percent do not know a reason why the American colonies rebelled against Great Britain.

## CURRICULUM OBSERVATIONS

Instructional materials exist and are easily available to attack directly some of the problems indicated by the assessment. Although there are no complete, new curricula in social studies, as there are in mathematics and the sciences, there are materials to help achieve these objectives and accommodate some of these concerns. Social studies materials ought to:

- Provide an incisive and rigorous understanding of some aspects of American and world history.
- Lessen the effects of sex-role stereotyping with proper mixtures of illustrations, examples in the text, and analogies.
- Encourage students to develop critical thinking, challenge assumptions, make inferences cautiously on the basis of some evidence; and separate fact from opinion.
- Present government and economics in a rigorous fashion at the high school level.

Some excellent enrichment materials are available such as newspaper-in-the-classroom programs, pamphlets on the federal government and films about other cultures. In addition some textbook series, at each school level, cover many of the social studies topics which seemed to present trouble on the assessment. It is interesting to note that what was generally considered innovative material a few years ago now is soundly incorporated in some of the curricula.

## CURRICULUM MATERIALS

### K - 8

People: Cultures, Times, Places  
Addison Wesley

Social Studies Data Bank  
Holt Rinehart and Winston

Social Studies  
Houghton Mifflin

Social Studies  
Noble and Noble

Educational Games  
Abt Publications

Smithsonian Slide Sets  
Photographic Services

Social Sciences: Concepts and Values  
Harcourt Brace Jovanovich

Multi-Cultural Materials  
Inter Culture Associates

Family of Man and Matchbox Series  
Selective Educational Equipment

Urban Communities (upper elementary)  
Charles E. Merrill



Newspaper-in-the-Classroom  
The Boston Globe

School Division  
The New York Times

Scholastic Readers

Smithsonian Institution

Social Sciences  
Silver Burdett

Textbook by Wire (upper elementary)  
Associated Press

Varied Materials (pamphlets, books, maps)  
J. Weston Walch

Man: A Course of Study (upper elementary)  
Curriculum Development Associates

### Junior High School

From Subject to Citizen  
Denoyer-Geppert

America Is and In Search of Justice  
Charles E. Merrill

Jackdaws  
Rancourt and Company

History and Government Series  
Benziger

Social Studies  
Follett Publishing Company

Spoken Arts Multi-media  
Rancourt and Company

Documentary Photo Aids  
Documentary Photo Aids

Public Issues Series  
American Education Publications

The American Experience  
Scholastic and Smithsonian Institution

Newspaper-in-the-Classroom Programs  
The Boston Globe and the New York Times

Multi-Cultural Materials  
Interculture Associates

Textbook by Wire  
Associated Press

Social Studies  
Holt Rinehart and Winston

Social Studies  
Houghton Mifflin Company

Time-Life-Books & This is Our World  
Silver Burdett

Story of Our Country  
Allyn and Bacon

Social Studies  
Addison Wesley

Social Sciences  
Heinemann Education Books Ltd

Two Centuries of Progress  
Laidlaw Brothers

### High School

Social Studies  
McDougal, Littell & Company

This Is America's Story and Series  
Houghton Mifflin Company

Social Studies  
Holt Rinehart Winston

A Global History of Man  
Allyn and Bacon

World Cultures & The American Dream  
Scott Foresman

Social Studies  
Scott Foresman

Varied Materials (books and pamphlets)  
Benziger

Holocaust Materials  
Brookline School System and ADL

Public Issues Series  
American Education Publications

Social Studies Texts  
The Independent School Press

History of A Free People and New Perspectives in American History  
Macmillan

Government and Politics  
Congressional Quarterly

The New York Times School Weekly

Newspaper-in-the-Classroom Programs  
The Boston Globe, The Christian Science Monitor and The New York Times

Social Studies  
Allyn and Bacon

Varied Maps  
Rand McNally

Education Games  
Abt Publications

Social Studies  
Science Research Associates

Social Studies  
Harcourt Brace Jovanovich

Varied Materials (pamphlets, books, maps)  
J. Weston Walsh

Problems in American Civilization and The Great Republic and America: A Modern History of the United States  
D. C. Heath

The Lincoln Filene Center at Tufts University offers short-term courses in economics and other social sciences for teachers.

Note: Many trade publishers distribute school catalogs, including Bantam Books, Inc., 666 Fifth Avenue, New York, N. Y. 10019 and ERIC Clearinghouse for Social Studies/Social Science Education, 855 Broadway, Boulder, Colorado 80302 which are useful resources. An excellent resource book for teachers is Teaching Public Issues in the High School, by Oliver and Shaver, published by Houghton Mifflin Company. Excellent documentary photographs and editorial cartoons are published by Documentary Photo Aids, P.O. Box 956, Mount Doro, Florida 32757.

## VIII

### WRITING

#### COMMENTARY

This part of the assessment dealt mainly with examples of basic writing skills such as taking telephone messages, addressing envelopes and completing application forms. In addition nine and seventeen year olds were required to write an essay on an assigned task.

Writing well is not a survival skill; it is a talent that is learned over a period of years by writing, by reading models of clear thinking and good writing, and by having sensitive and perceptive teachers and critics. To learn how to write well is a life-long process, not just a superficial skill that can be taught in a few years. There is an erroneous impression that the required language skills can all be taught in the elementary grades. There was a time, of course, when elementary schools were called grammar schools; but there is no reason to assume that because grammar may have been stressed more in the past, younger students were able to communicate in writing any better than they are today. Apparently, continuing programs are needed to teach all students -- from elementary school through college -- how to write.

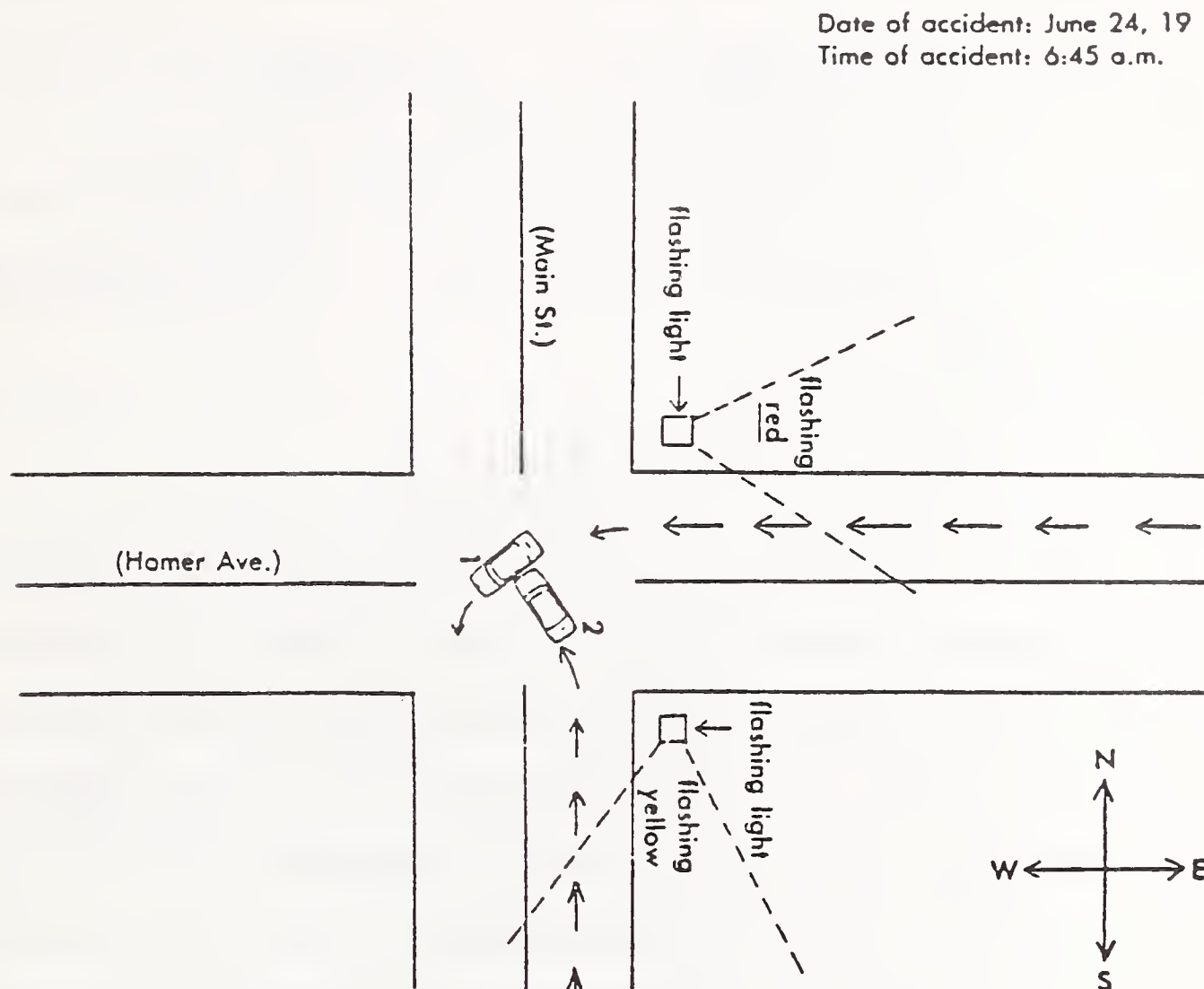
#### FINDINGS

##### Writing - Sex Differences

At both age levels, girls performed better than boys. Among the nine year olds, girls show more proficiency at reading on 20 out of 22 questions; and seventeen year old girls performed better than boys on 25 of the 36 questions. And the same differences exist in their demonstration of writing proficiency. Seventeen year old girls, for example, are better at



following directions, taking messages, and reading instructions. An interesting example in which the high school girls out-perform boys is their performance in writing a description of the following accident diagram:



Only 33 percent of the seventeen year olds -- boys and girls -- gave acceptable answers for the accident report; nationally, 54 percent gave acceptable answers.

#### Writing - National Comparisons

Nine year olds appear to do well in writing. Based on both the national and Massachusetts assessments, the data suggest that nine year olds in the Commonwealth write above the national average. They do better than, or

as well as, their national counterparts in communicating in social or business situations. The only instance in the assessment in which they performed less well than their national counterparts was in writing an essay. Seventeen year olds can neither communicate in social or business situations, nor write essays as well as their national counterparts. Twenty-six percent cannot spell "Massachusetts" correctly. Additionally, seventeen year olds misspelled an average of slightly over two words out of every hundred and made an error in punctuation in roughly the same proportion. Predictably, seventeen year olds in college bound programs performed better than their peers in general and vocational programs.

#### CURRICULUM OBSERVATIONS

The key to writing is not the sentence itself but rather the thought behind the sentence. Students must sharpen their critical skills before they can be good writers. Language, literature, and composition build the foundation and unless students read, discuss, and write about literature and history of the highest order, it is unlikely they will appreciate good writing, let alone recognize it. There is no major program that alone creates good writers. But it really should not be so difficult to teach students to write effectively, simply and clearly. Instructional materials of all kinds--from grammars to composition books and novels and plays--are easily available to help improve writing.

Elementary schools generally do a better job of teaching writing than junior and senior high schools, perhaps because there may be a premium on imaginative writing, or writing with feeling in the elementary grades. This kind of writing seems to decrease as a student progresses in school.

## CURRICULUM MATERIALS

### K - 8

Many of the programs and materials listed in the section on reading are also appropriate for improving writing abilities. These language arts programs are suggested:

Communications Skills Program  
Ginn

Language Arts Series  
Houghton Mifflin Company

Language Arts Series  
Holt Rinehart and Winston

Language Arts  
Prentice Hall

Language Arts  
Addison Wesley

Language Arts  
Harcourt Brace Jovanovich

Language Arts  
Charles E. Merrill

Basic Verbal Skills Series  
The Independent School Press

Some schools may want to develop their own writing programs, mainly by selecting books from a number of different publishers, including:

Little Brown

The Macmillan Co.

Citation Press  
Scholastic Book Services

Dell Publishing Company

Random House

### High School

The same publishers listed before, and many more trade publishers, also publish composition and language arts programs for the high school grades. Teachers will want to select their own programs and books; the choice is extremely wide and many less-expensive paperback books are available.

Some excellent books and grammars are: The Elements of Style, by Strunk and White, Writing Well, by Donald Hall and Harbrace Handbook of English. Hooked on Books, by Fader and McNeill, is also a useful resource for teachers.



SCIENCE AND ECOLOGYCOMMENTARY

The expansion of knowledge in the natural and physical sciences in recent decades is reflected in many science courses in the high school, and rigorous, experimentally-oriented science programs are available at all grade levels. Excellent options are available. Many programs come with a host of learning aids: films, laboratory apparatus and experiments, and texts. Collateral reading and examinations are all complementary and integral parts of the whole. Each medium of instruction is being used to its best advantage to reinforce, not duplicate, the effectiveness of the others. The National Science Foundation has allocated more than \$300 million since 1956 to develop laboratory-oriented science courses at all grade levels; roughly \$400 million more has been devoted to teacher training institutes.

FINDINGSEnrollment in Laboratory Courses

Almost 32 percent of the seventeen year olds report that they never had a laboratory-oriented science course; and the performance of these students on the assessment is lower than that of students who have studied in laboratory-oriented programs.

Science and Ecology - Parental Involvement

The higher-performing students in the high school group report that they talked with their parents "fairly regularly" about science. Poorer-performing students do not have this linkage with their parents. The assessment suggests the more parent involvement the better.

## Science and Ecology - Sex Differences

As in the national assessment, high school girls in the Massachusetts assessment performed poorer than boys in all science subjects, including biology and ecology. The effects of sex-role stereotyping are as debilitating as they are alarming.

The differences among the nine year olds are imperceptible. A 1974 study of science in Massachusetts elementary schools<sup>\*</sup> reported that only 14 percent of a sample of fifth and sixth grade students felt that society wanted girls to become scientists. Children's attitudes about science as well as the assumption that girls cannot do experimental work appear to be generated during the elementary years, therefore aggravating the poor performance of girls in later years.

## Science and Ecology - Supervision

Seventy-four percent of the elementary schools in the sample, report they have neither a science supervisor nor a science coordinator assigned to them. The 1974 study<sup>\*\*</sup> reported that the likelihood of a school using National Science Foundation supported programs was related to the presence of a science coordinator in the system.

## Science and Ecology - Background

Science performance in both age groups is related to family occupation and economic background. Students in residential suburbs performed better than students who live in other kinds of communities.

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\* Essentially Elementary Science, Dean K. Whitla and Dan C. Pinck, Harvard University, 1974

\*\* Ibid.

## Science and Ecology - National Comparisons

Nine year olds do extremely well compared to their national counterparts. Seventeen year olds scored at a level identical to their national counterparts. Most Massachusetts nine year olds know that the earth moves once a year around the sun. However, few nine year olds know that the sun provides the energy that plants need to make food. Most Massachusetts seventeen year olds can identify the function of electrons in forming chemical bonds. However, few seventeen year olds know that sound travels faster in cold air than in hot air.

### CURRICULUM OBSERVATIONS

The better science programs make progress possible and help to bring about a greater understanding of science. The extensive course content improvement work spearheaded by the National Science Foundation has affected the science programs of the majority of publishers.

The better programs have some of these attributes:

- an experimental approach, with hands-on laboratory experiences as an integral part of the teaching and learning process
- a vision of science as something to "do" not just something to "read" about; the better programs encourage independent learning
- experimental activities which encourage individual experimentation and which can help to change girls' attitudes toward science by dispelling the belief that an interest in science and the ability to perform science experiments are sex-linked functions
- teaching guides of superior quality
- both a sound understanding of science as a process of inquiry and the experiences necessary to apply concepts and knowledge



- a recognition, at the elementary level, of science as a total discipline, not a number of separate disciplines
- provision for a rich mixture of science programs as well as supplemental materials for slow and fast learners at the secondary level

## CURRICULUM MATERIALS

### K - 8

Elementary Science Study (ESS)  
McGraw-Hill Book Co.

Elementary Science Study (ESS)  
American Science and Engineering

Science Curriculum Improvement Study (SCIS)  
Rand McNally and Co.

Science Curriculum Improvement Study (SCIS)  
American Science and Engineering

Science A Process Approach  
Xerox

Modular Activities Program in Science  
Houghton Mifflin

Concepts in Science  
Harcourt Brace Jovanovich

Earth and Space Science  
Learning Technology, Inc.

Elementary Science Study (ESS)  
Addison-Wesley

Unit Box Approach  
Professor Mitchell M. Batoff

Science 5/13  
Purnell Educational

Note: All science teachers in all grades should be fully aware of science safety. An excellent handbook was compiled by Martin W. Pankratz, Director of Science for the public schools of Medford, and by the members of the Massachusetts Association of Science Supervisors. This handbook is available for Massachusetts schools. In a recent paper, Ruth T. Wellman of Marshall University, in Huntington, West Virginia reported on science as a basic language for reading development. Her survey reviews research indicating that reading proficiency increased in controlled situations when students in elementary schools were studying the Science Curriculum Improvement Study, the Elementary Science Study, or the Science A Process Approach.

## Junior High School

Introductory Physical Science (IPS)  
Prentice Hall

Physical Science Investigations and  
Earth Science Curriculum Project (ESCP)  
Houghton Mifflin Company

Ideas and Investigations in Science (IIS)  
Prentice Hall

Man and the Biosphere  
Rand McNally

Intermediate Science Curriculum  
Study (ISCS)  
Silver Burdett

Concepts in Science  
Harcourt Brace Jovanovich

Elementary Science Study (ESS)  
McGraw Hill and Selective Educational  
Equipment

Junior High Science  
Addison Wesley

## High School

### Biology

The Biological Sciences Curriculum Study (BSCS) produced four different versions, aimed at varying ability levels. Materials are published by four different publishers. For information, write to: BSCS, P.O. Box 930, Boulder, Colorado 80302. (Houghton Mifflin, in Boston, publishes the Yellow Version of the BSCS.)

Biology  
Holt Rinehart and Winston

Biology  
D.C. Heath

Biology Today  
Random House

Biology  
John W. Wiley & Son

Biology  
W. H. Freeman

Biology  
Worth Publishing Co.

Biology  
Allyn and Bacon

### Physics

Project Physics  
Holt Rinehart Winston

Physical Sciences Study Committee  
Prentice Hall

Modern Physics  
Holt

Physics  
Houghton Mifflin Company

Physical Science Study Committee  
D. C. Heath

Physics  
Addison Wesley

Physics  
Allyn and Bacon

Concepts in Physics  
Harcourt Brace Jovanovich

Matter and Energy  
Barns and Noble

Chemistry

Self Paced Independent Study Course  
Prentice Hall

Experimental Foundations of Chemistry  
D. C. Heath

Modern Chemistry  
Holt Rinehart and Winston

Foundations of Chemistry  
Holt Rinehart and Winston

Chemistry  
Harcourt Brace Jovanovich

Chemistry  
Silver Burdett

Chemistry: An Experimental Science (CHEM)  
D. C. Heath



ADDITIONAL RESOURCES

Resources and Referral Service RRS Mini-Lists  
 Research and Exchange  
 National Institute of Education  
 Washington, D.C. 20208

Reports from Educational Facilities Laboratories, Inc.  
 477 Madison Avenue  
 New York, N.Y. 10022

Instructional Materials: Selection and Purchase  
 National Education Association  
 Washington, D.C.

Exchange of Curriculum Materials  
 Merrimack Education Center  
 101 Mill Road  
 Chelmsford, Massachusetts 01824

Trends and Tempos Exchange Bank  
 IES MEC Information Service  
 101 Mill Road  
 Chelmsford, Massachusetts 01824

EPIEgram, The Educational Consumers Newsletter  
 Educational Products Information Exchange Institute  
 475 Riverside Drive  
 New York, N.Y. 10027

Kaleidoscope and other publications and services  
 Bureau of Curriculum Services  
 Massachusetts Department of Education  
 31 St. James Avenue  
 Boston, Massachusetts 02116

Handbook on Collaboratives in Massachusetts; varied projects and programs  
 Hampshire Educational Collaborative  
 127 Russell Street  
 Hadley, Massachusetts 01035

Massachusetts Educational Television  
 Bureau of Media Services  
 Massachusetts Department of Education  
 54 Rindge Avenue Extension  
 Cambridge, Massachusetts 02140

Massachusetts Film and Media Service Cooperative  
 Fitchburg State College  
 Fitchburg, Massachusetts 01420

ADDRESSES OF PUBLISHERS

Abt Publications  
55 Wheeler Street  
Cambridge, MA 02138

Addison Wesley Publishing Company, Inc.  
Jacob Way  
Reading, MA 01167

Allyn and Bacon, Inc.  
Rockleigh, N.J. 07647

American Education Publications  
55 High Street  
Middleton, CT 06457

American Science and Engineering  
955 Massachusetts Avenue  
Cambridge, MA 02139

Anti-Defamation League  
315 Lexington Avenue  
New York, N.Y. 10016

Associated Press  
260 Summer Street  
Boston, MA 02210

Atheneum  
122 East 42nd Street  
New York, N.Y. 10024

Australian Science Education Project  
11 Glenbervie Road  
Toorak  
Victoria, Australia 3142

Barnell Loft Inc.  
958 Church Street  
Baldwin, N.Y. 11510

Benziger  
8701 Wilshire Boulevard  
Beverly Hills, CA 90213

Boston Globe  
135 Morrissey Boulevard  
Boston, MA 02107

Chatto and Windus Educational Ltd.  
42 William IV Street  
London, England

Christian Science Monitor  
1 Norway Street  
Boston, MA 02115

Citation Press  
Scholastic Book Services  
50 West 44th Street  
New York, NY 10036

Congressional Quarterly, Inc.  
1414 22nd Street NW  
Washington, D.C.

Creative Publications  
1101 Antonio Road  
Mountain View, CA 94303

Culsenaire Company of America, Inc.  
12 Church Street  
New Rochelle, NY 10805

Curriculum Development Associates, Inc.  
1211 Connecticut Avenue  
Washington, D.C. 20036

Dell Publishing Company  
750 Third Avenue  
New York, NY 10017

Denover-Geppert Co.  
5235 Ravenswood Avenue  
Chicago, IL 60640

Documentary Photo Aids  
P.O. Box 956  
Mount Dora, FL 32757

Doubleday and Company  
School Department  
Garden City, L.I., NY 11530

Educational Enrichment Materials  
59 Woodford Street  
Portland, ME 14103

Educational Supply Association Ltd.  
Pinnacles, Harlow, Essex, England

Educators Publishing Service, Inc.  
75 Moulton Street  
Cambridge, MA 02138

Farrar, Straus and Giroux  
19 Union Square West  
New York, NY 10003

Follett Publishing Company  
1010 W. Washington Boulevard  
Chicago, IL 60607

Four Winds Press  
906 Sylvan Avenue  
Englewood Cliffs, NJ 07632

W. H. Freeman  
660 Market Street  
San Francisco, CA 94104

James Galt Export Ltd.  
P.O. Box 2  
Brookfield Road, Cheadle,  
Cheshire, England

Ginn and Company  
191 Spring Street  
Lexington, MA 02173

Harcourt Brace Jovanovich, Inc.  
757 Third Avenue  
New York, NY 10017

Harvey House Books for Children  
20 Waterside Plaza  
New York, NY 10010

D.C. Heath and Company  
125 Spring Street  
Lexington, MA 02173

Holt Rinehart and Winston  
383 Madison Avenue  
New York, NY 10017

Houghton Mifflin Company  
One Beacon Street  
Boston, MA 02107

Independent School Press  
51 River Street  
Wellesley Hills, MA 02181

Inter Culture Associates  
P.O. Box 277  
Thompson, CT 02277

Iteinemann Educational Books Ltd.  
48 Charles Street  
London W. England

Alfred A. Knopf, Inc.  
201 East 51st Street  
New York, NY 10022

Laidlaw Brothers  
Thatcher and Madison Streets  
River Forest, IL 60405

Learning Technology, Inc.  
435 Newtonville Avenue  
Newtonville, MA 02160

Levell and Lynwood Ltd.  
964 Church Street  
Baldwin, NY 11510

Little Brown  
34 Beacon Street  
Boston, MA 02106

Lothrop, Lee and Shepard Company  
105 Madison Avenue  
New York, NY 10016

McDougal, Littell and Company  
P.O. Box 1667-S  
Evanston, IL 60204

McGraw Hill Book Company  
1221 Avenue of the Americas  
New York, NY 10036

McMillan Publishing Company, Inc.  
Riverside, NJ 08075

Charles E. Merrill Publishing Co.  
1300 Alum Creek Drive  
Columbus, OH 43216



Merry Thoughts 380 Adams Street Bedford Hills, NY 10507	Scholastic 906 Sylvan Avenue Englewood Cliffs, NJ 10632
Noble and Noble Publishers, Inc. 245 East 47th Street New York, NY 10017	Scott, Foresman and Co. 1900 E. Lake Avenue Glenview, IL 60025
The New Republic Book Co. 1220 19th Street NW Washington, D.C.	The Seabury Press 815 Second Avenue New York, NY 10017
W. W. Norton and Co., Inc. 500 Fifth Avenue New York, NY 10036	Selective Educational Equipment 3 Bridge Street Newton, MA 02158
Open Court Publishing Co. P.O. Box 599 LaSalle, IL 61301	Silver Burdett Co. 250 James Street Morristown, NJ 07960
S. G. Phillips 305 W. 86th Street New York, NY 10024	Smithsonian Institution 1000 Jefferson Drive, SW Washington, D.C.
Prentice Hall, Inc. Englewood Cliffs, NJ 07602	Stanford University Press Stanford, CA 94305
Purnell Educational 850 7th Avenue New York, NY 10019	Teaching Resources, Inc. 110 Boylston Street Boston, MA 02116
G. P. Putnam's Sons 200 Madison Avenue New York, NY 10016	Viking Junior Books 635 Madison Avenue New York, NY 10022
Rancourt and Co. 59 Woodford Street Portland, ME 04103	J. Weston Walch 321 Valley Street Portland, ME 04104
Rand McNally P.O. Box 7600 Chicago, IL 60680	John Wiley and Sons, Inc. 605 Third Avenue New York, NY 10016
Random House 457 Hahn Road Westminister, MD 21157	Winston Press 25 Groveland Terrace Minneapolis, MI 55403
William H. Sadlier, Inc. 11 Park Place New York, NY 10010	Worth Publishers, Inc. 444 Park Avenue S. New York, NY 10016

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# Resources For Schools...



## **MASSACHUSETTS DISSEMINATION PROJECT**

Massachusetts Department of Education  
31 Saint James Avenue  
Boston, Massachusetts 02116

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Boston, Mass.

...connecting Massachusetts schools  
with materials, programs, and people.

# RESOURCES FOR SCHOOLS

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DEPARTMENT  
OF EDUCATION

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MASSACHUSETTS  
DEPARTMENT OF EDUCATION

## 9. RESOURCES FOR TRAINING EDUCATORS OF CHILDREN WITH SPECIAL NEEDS



MASSACHUSETTS  
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# RESOURCES FOR SCHOOLS

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290 South Main Street  
Andover, Massachusetts 01810



Resources for Schools is a series of publications developed by the Massachusetts Dissemination Project (MDP) for Massachusetts educators, parents, and students. The project, funded by the National Institute of Education, has four major goals:

- to stimulate greater awareness of the resources available to Massachusetts schools;
- to provide educators, parents, and students with specific information about resources and materials for school programs and services;
- to assist regional education centers and the Department to increase and improve information and dissemination services to educators, parents, and students in the state;
- to encourage greater exchange and sharing of resources among educational organizations, service providers, the Department of Education and its regional education centers, and school personnel.

The project is located in the Department's Boston office. In addition, each regional center has designated a staff member who maintains continuous contact and involvement with project activities across the state, and is responsible for working with center staff to improve information and dissemination services in the center. Ultimately, the regional centers will function as switchboards -- sometimes providing services directly to schools, other times connecting them with the many existing resources. The development of this series -- as its name suggests -- is one way the project is helping make these connections. *Please contact a member of the project staff for more information about the series, the project or the regional center nearest you.*



Resources for Schools presently available:

1. A Catalog of Publications from the Massachusetts Department of Education (being revised)
2. Video Tapes for Teaching (being revised)
3. A Guide to Dissemination Agencies (being reprinted)
4. Community Involvement in Your School: A Guide to People, Programs and Publications
5. The Student's Guide to Special Education (being reprinted)
6. Implementing Chapter 622: Exemplary Programs for Alleviating Racism and Sexism in Massachusetts Schools
7. Competency Programs for Basic Skills Improvement: A Resource Guide
8. A Review of Massachusetts Statewide Assessment Findings: A Curriculum Interpretation of the Major Findings of the Massachusetts Statewide Assessment Program

Resources for Schools topics to look for in the future:

- Education of Gifted and Talented Students
- Student Rights and Responsibilities
- Options in Environmental Education
- Guidance and Counseling Programs
- Related Educational Agencies
- Community Education

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## INTRODUCTION

Since Chapter 766 became effective in 1972 and Public Law 94-142 in 1977, schools have had numerous demands placed on them in their efforts to provide quality education to children with special needs. Meeting these demands effectively often requires new knowledge and skills for administrators, parents, special educators, teachers, paraprofessionals and other people involved with the education of children with special needs.

A wealth of information and resources exists to help people in schools meet their need for training. This guide provides a sample of what is available to different types of people with different needs for training. To compile this sample, a group of about two hundred and fifty Massachusetts teachers, administrators, parents, college and university professors and Department of Education staff were asked to recommend the best and most accessible training resources.

The resources included in this guide provide a wide range of materials and programs -- from a film for parents of children with special needs, to a leadership appraisal seminar for school administrators, to a resource and training center for teachers of bilingual students with special needs. Virtually all of the recommendations sent to us are included with two exceptions: 1) a few people recommended private consultants;



their names are not included because the Department of Education's newly created Commonwealth Inservice Institute\* will be maintaining a file of people who can act as consultants to schools with varying training needs, and 2) some people recommended specific programs at colleges and universities; these have all been incorporated in Section IV which briefly describes all the special education training programs at colleges and universities in Massachusetts.

This resource guide is the result of a collaborative effort by the Massachusetts Dissemination Project and the Special Education Manpower Project in the Department of Education. A major goal of the Manpower Project is the development of a comprehensive special education manpower planning system for Massachusetts. As part of this effort, the Project recognizes the need to maximize the efficient utilization and sharing of training resources. A major goal of the Dissemination Project is to help educators, parents, and students find and use information resources to improve school programs. This collaborative project arose from these common goals. The Policy Advisory Board to the Manpower Project, composed of representatives from professional associations, colleges and universities, parent organizations, public schools, and state agencies involved in special education, has participated in the development of this resource guide

*\*For more information about the Commonwealth Inservice Institute, contact a regional education center of the Massachusetts Department of Education. The addresses and phone numbers are listed at the end of this publication.*

from its very beginning and has provided continued support and feedback for its direction.

In preparing this resource guide, the assistance of a number of people has been invaluable: Cecilia DiBella, Director of the Massachusetts Dissemination Project; Catherine Evans, Special Education Manpower Project; Cynthia Gilles, Director of the Special Education Manpower Project; Ruth Santer, Massachusetts Dissemination Project Secretary; and staff members from The NETWORK, Inc.

Elizabeth J. Maillett

May, 1979



## ORGANIZATION OF THIS GUIDE

*Resources for Training Educators of Children with Special Needs* is divided into five sections. Sections I and II describe a variety of training materials and training programs. Descriptions are organized according to the specific need or group of people on which they focus (e.g., severe special needs, regular classroom teachers).

Section III lists resource centers and general sources of information and training throughout the country that can address a variety of training needs in special education. Wherever possible, throughout the first three sections, information about costs has been included or listed as unavailable. Where costs have not been noted, there is usually no charge.

Section IV lists training programs offered by Massachusetts colleges and universities. Programs that have received approval from the Department of Education are noted in italics. Finally, Section V lists the titles of all resources alphabetically.

The organizations, materials, and programs described in the first three sections were recommended to the Dissemination Project by a variety of special education practitioners in



the Commonwealth. The inclusion of these resources in this guide does not imply endorsement by the Massachusetts Department of Education.

**SECTION I**

**Training Materials**



## ADAPTED PHYSICAL EDUCATION

### AMERICAN ALLIANCE FOR HEALTH, PHYSICAL EDUCATION, AND RECREATION INFORMATION AND RESEARCH UTILIZATION CENTER (AAHPER/IRUC)

The Center provides various services to educators including: reprint services, practical pointers, information updates, custom and contractual services, mailing lists and labels, briefing and consultation services on adaptive physical education and related topics. Some publications of particular interest to physical education teachers who work with handicapped children and adults: *Making Physical Education and Recreation Facilities Accessible to All* (\$5.00), *Motor Fitness Testing Manual for the Moderately Mentally Retarded* (\$3.95), *Physical Education and Recreation for the Visually Handicapped* (\$3.25).

CONTACT: AAHPER  
1201 16th Street, N.W.  
Washington, D.C. 20036  
(202) 833-5541

## ADMINISTRATORS

### DIRECTORY OF NATIONAL INFORMATION SOURCES ON HANDICAPPING CONDITIONS AND RELATED SERVICES

This directory was compiled as a major reference tool to enable the Clearinghouse on the Handicapped to make meaningful referrals in response to public inquiries and as a service to other information providers to increase their understanding of each other's services and, consequently, to advance the



entire field of information relative to the handicapped.

Cost: \$6.00.

CONTACT: *Clearinghouse on the  
Handicapped  
Office for Handicapped  
Individuals  
388-D South Portal Bldg.  
DHEW  
Washington, D.C. 20201  
(202) 245-1961*

EDUCATIONAL PROGRAMS THAT WORK

This catalog, compiled annually by the U.S. Office of Education (OE), describes a variety of projects developed by local school people and approved for national dissemination by a review panel within OE. They vary in philosophy, in cost, and in complexity, but each actually works effectively with children in learning situations. This source book serves as both a resource for ideas and a concise review of programs that are already successfully meeting the challenges of providing high-quality educational opportunities for learners of various ages. A significant number of the programs deal specifically with special education. Cost: \$5.00 (prepaid)

CONTACT: *Order Department  
Far West Laboratory for  
Educational Research  
and Development  
1855 Folsom Street  
San Francisco, CA 94103  
(415) 565-3000*

INSTRUCTIONAL TECHNOLOGY AND THE EDUCATION OF ALL HANDICAPPED CHILDREN

This collection of papers by seventeen educators discusses some of the implications of P.L. 94-142. Topics include individualized educational programs, implications for change in preservice and inservice training programs for regular and special education teachers, designing and selecting instructional materials for severely handicapped students, mainstreaming, evaluation of programs and instructional materials, prescriptive teaching, and rights of handicapped children.

CONTACT: *Educational Technology  
Publications  
140 Sylvan Avenue  
Englewood Cliffs, NJ .07632  
(201) 871-4007*

PROJECT MANAGEMENT BASIC PRINCIPLES AND TECHNIQUES

*Project Management Basic Principles and Techniques* is a training product that teaches school district staffs to manage educational projects to assure attainment of project objectives within time, cost and performance constraints. Specific areas covered by the product are: defining the project goals, developing the project work breakdown and work-flow diagram, preparing time estimates, estimating and scheduling resources, developing the project budget, planning project start-up, developing a project information system and a procedures handbook, monitoring project operations, project

problem-solving through management action, implementing changes in project operations, and developing a project termination plan. Cost: \$27.50 for three manuals.

CONTACT: *Research for Better  
Schools  
Suite 1700  
1700 Market Street  
Philadelphia, Pa. 19103  
(215) 561-4100, ext 237*

## AFFECTIVE DEVELOPMENT

### HUMAN DEVELOPMENT PROGRAM

For the classroom teacher who is interested in encouraging open communication between teacher and child and between children, this affective curriculum concentrates on social and emotional development. The program provides a sequential plan for each grade level, divided into three, 6-week units or themes; increasing awareness of the feeling, thoughts, and behavior of self and others; developing a feeling of self-worth within the child; and increasing social understanding and competencies. The Human Development Training Institute also offers a three or five-day workshop for interested school systems. Costs: theory manual - \$6.95, "Magic Circle" story and activity booklets (set of 10) - \$3.60 (40¢ each).

CONTACT: *Human Development Training  
Institute  
7574 University Avenue  
LaMesa, CA 92041  
(714) 462-8230*

KIDS ACCEPTED HERE

This activities program provides elementary classroom teachers with student activities that facilitate the acceptance of handicapped children in the mainstream. It was developed and field tested in a Massachusetts school system that was preparing to integrate special needs children back into the mainstream of education. Cost: \$5.00.

CONTACT: *The NETWORK*  
290 South Main Street  
Andover, MA 01810  
(617) 470-1080

TOWARD AFFECTIVE DEVELOPMENT (TAD)

TAD is a program for grades 3-6 designed to stimulate psychological and affective development through a structured and sequentially developed curriculum. The program uses a simple-to-follow lesson plan format and stresses the active participation and interaction of the student. Lessons employ games, modeling, acting out, brainstorming, group tasks and discussions, and field trips to: extend students' openness to experience, help students recognize and accept feelings and interpersonal events, help students become aware of their unique characteristics and the adult careers open to them, help students develop a model for making reasoned choices. The TAD kit includes a manual and all materials



necessary for the lessons. Cost: \$90 for the complete kit.

CONTACT: *American Guidance Service,  
Inc.  
Publishers Building  
Circle Pines, MN 55014  
(612) 786-4343*

## EARLY CHILDHOOD EDUCATION

### COLORADO EARLY CHILDHOOD STUDY

This study provides basic data that may be used to design plans to serve the educational or childcare service-related needs of children, from birth to 5 years of age. The focus is on children placed outside the home in pre-kindergartens and day care centers. The study performed in 1976, presents data, identifies needs, and suggests possible approaches to meeting those needs.

CONTACT: *Colorado Department of  
Education  
Communications and Publi-  
cations Services Unit  
State Office Building  
201 East Colfax  
Denver, CO 80203  
(303) 892-2195*

### ERIC CLEARINGHOUSE ON EARLY CHILDHOOD EDUCATION (ERIC/ECE)

ERIC/ECE, one of 16 ERIC Clearinghouses sponsored by the National Institute of Education (NIE), is responsible for abstracting and indexing documents relating to the total care of children from birth through age 12. This Clearinghouse

also offers manual or computer search services and information analysis papers in the area of early childhood education.

CONTACT: *ERIC/ECE*  
*805 W. Pennsylvania Ave.*  
*Urbana, IL 61801*  
*(217) 333-1386*

*IT'S MONDAY MORNING*

*It's Monday Morning* is a book containing descriptions of twenty-seven model projects in early childhood education. It discusses the services offered by the projects, the impact they had on their communities, and provides information on a variety of ways to meet the needs of young children with handicaps.

CONTACT: *Technical Assistance Development System for the First Chance Network*  
*University of North Carolina*  
*5000 NCNB Plaza*  
*Chapel Hill, NC 27514*  
*(919) 967-9221*

*MORE YELLOW PAGES*

This bi-monthly newsletter for teachers and parents provides information about a variety of issues related to early childhood education. These include new projects and programs in the area of early childhood education, media materials, workshops, suggestions, ideas and other resources.

CONTACT: *Department of Mental Health  
Children's Services  
190 Portland Street  
Boston, MA 02114  
(617) 727-8600*

PROJECT ME

The project is a comprehensive training program for early childhood education teachers working with handicapped children. The program includes six modules: "Why Me," "Assess Me," "Place Me," "Teach Me," "Parent Me," "Accept Me." Cost: \$260.

CONTACT: *Donroy Hafner, Director  
Instructional Services  
Educational Service Center  
Region XIII  
7703 North Lamar  
Austin, TX 78752  
(512) 458-9131*

SPELLBINDER

For teachers of young handicapped children, *Spellbinder* utilizes the concept of the teaching machine and offers programs in reading and math for pre-kindergarten through grade 4. The programs include material on readiness skills for pre-readers, introduction to spelling for beginning readers, math skills for pre-kindergarten and grade 1, and a variety of other programs to enhance learning. Braille program cards and cards applicable to the deaf will be available in the future. Cost: \$55 for each program series.

CONTACT: *Spellbinder  
33 Bradford Street  
Concord, MA 01742  
(617) 369-1533*

TEXAS DAY CARE STUDY

This study conducted by the University of Texas at San Antonio provides information about job descriptions, career progression, and individual training records as they relate to early childhood education and day care situations.

CONTACT: *Division of Early Childhood Development  
Texas Department of Community Affairs  
P.O. Box 13166, Capital Station  
Austin, TX 78711  
(512) 475-5833*

UNDERSTANDING EARLY CHILDHOOD - AGES 1 THROUGH 6

This filmstrip kit focuses on the development of feelings in children including: how feelings grow; how to deal with fear, love, joy, anger and sadness; and how to express feelings. The kit can be used with beginning teachers, paraprofessionals, and with teacher aides and parent groups for inservice training. The program does not deal specifically with handicapped children, but it can be easily adapted for groups working with special children. Other kits available include: *Preparing the Child for Learning*, *The Child's Relationship with the Family*, and *The Child's Point of View*. Kits are available in English and Spanish. Costs unavailable.

CONTACT: *Parent's Magazine Films, Inc.  
52 Vanderbilt Avenue  
New York, NY 10017  
(212) 661-9080*



## INDIVIDUALIZED EDUCATION PROGRAMS (IEPs)

### INDIVIDUALIZED EDUCATION PROGRAMS FOR HANDICAPPED CHILDREN

This sound/filmstrip package was designed for workshops, seminars, and conferences for teachers, students, administrators and parents. It provides practical assistance in understanding and developing individualized education programs.

Cost: \$65.

CONTACT: *The Council for Exceptional  
Children  
1920 Association Drive  
Reston, VA 22091  
(800) 336-3728*

### THE INDIVIDUALIZED EDUCATION PROGRAM: KEY TO AN APPROPRIATE EDUCATION FOR THE HANDICAPPED CHILD (1977 Annual Report of the National Advisory Committee on the Handicapped) Stock #017-080-01699-1

This report examines IEPs from several points of view. Sections include a summary of the Committee's views and findings concerning: day-to-day implementation of the IEP concept; teacher preparation for IEP implementation; physical education, recreation, and leisure time education aspects of the IEP; and the IEP as it relates to the National Technical Institute for the Deaf and the Model Secondary School for the Deaf.

CONTACT: *Superintendent of Documents  
U.S. Government Printing Office  
Washington, D.C. 20402  
(202) 783-3238*

TRAINING RESOURCES FOR DEVELOPING, IMPLEMENTING, AND MONITORING IEPs

Primarily for teachers and special education administrators, this annotated bibliography lists a variety of multi-media resources that are available. Included are resources on identification and diagnosis, design, prescriptive programming, training activities (personnel workshops), and parent's guides to IEPs.

CONTACT: *Midwest Regional Resource  
Center  
1332 26th Street  
Drake University  
Des Moines, IA 50311  
(515) 271-3936*

LAWS AND REGULATIONS

AMICUS

*Amicus* is a journal published bi-monthly by the National Center for Law and the Handicapped, Inc. (NCLH). Each issue reports on what is happening in the news, in the legislature, and in the courts that affects handicapped people. In addition to these factual reports and analyses, certain issues are highlighted through interviews, editorials, and special reports. Cost: \$10.00 a year for individuals; \$12.00 a year for organizations and libraries.

CONTACT: *National Center for Law  
and the Handicapped, Inc.  
1235 North Eddy Street  
South Bend, IN 46617  
(219) 288-4751*

THE MAP, THE MISSION, AND THE MANDATE

This report provides a summary of the issues and directions presented at the regional conference on Personnel Preparation and Public Law 94-142. Special topics include: regional collaboration; cooperative manpower planning; P.L. 94-142 regulations; inservice programming and preservice priorities; innovation and evaluation in personnel preparation; dissemination; and current procedures and issues in grant administration. Cost: \$4.00 (includes postage and handling).

CONTACT: *Educational Resources Center  
1834 Meetinghouse Road  
Boothwyn, PA 19061  
(215) 485-4111*

P.L. 94-142: IMPLEMENTING PROCEDURAL SAFEGUARDS - A GUIDE FOR SCHOOLS AND PARENTS

Developed to provide practical assistance in dealing with procedural safeguard aspects of P.L. 94-142, this media-package includes three filmstrips, a user's guide, and duplicating handouts that highlight key facts. It is useful for workshops or seminars with teachers, students, parents, and administrators. Cost: \$90 for the full set.

CONTACT: *The Council for Exceptional  
Children  
Publications and Sales  
1920 Association Drive  
Reston, VA 22091  
(800) 336-3728*

SPECIAL EDUCATION ADMINISTRATIVE POLICIES MANUAL (SEAP)

Written for the educator and the policy maker, this manual explains how to implement policies that are consistent with P.L. 94-142 and Section 504. It includes such policy areas as: the right to education, population, identification, evaluation, placement, service delivery, facilities and transportation, personnel, fiscal management and procedural rights and policies. The manual includes sample forms that are used by many education agencies. Cost: \$27.50.

CONTACT: *The Council for Exceptional  
Children  
Publications Sales  
1920 Association Drive  
Reston, VA 22091  
(800) 336-3728*

MAINSTREAMING

AN IMPLEMENTATION MANUAL FOR RESOURCE ROOM TEACHERS

Developed by Pennsylvania's formerly funded Child Service Demonstration Center, this book provides a comprehensive guide for establishing a resource room program. It features "hands on" advice for those looking for alternative approaches to helping children with learning disabilities. Cost: \$2.00.

CONTACT: *The NETWORK  
290 So. Main Street  
Andover, MA 01810  
(617) 470-1080*



FIRST STEPS IN MAINSTREAMING

This material produced by the Eliot-Pearson Children's School addresses some of the more basic issues regarding mainstreaming including rationale, alternative forms of mainstreaming, classroom organization, individualized instructional adaptations and teacher skills.

CONTACT: *The Eliot-Pearson  
Children's School  
Tufts University  
105 College Avenue  
Medford, MA 02155  
(617) 628-5000*

HANDICAPPED YOUTH AND THE MAINSTREAM EDUCATOR 1975  
VOLUME IV OF LEADERSHIP SERIES IN SPECIAL EDUCATION

This publication is for special education professionals who are concerned about mainstreaming. It presents a variety of viewpoints on the implications of mainstreaming children with special needs. Various perspectives from higher education, public schools, teacher organizations, and other related fields are presented.

CONTACT: *Audio-Visual Library Service  
University of Minnesota  
3300 University Avenue, S.E.  
Minneapolis, MN 55414  
(612) 373-3810*

INSERVICE TEACHER TRAINING FOR MAINSTREAMING

This series is a set of four, competency-based, training manuals developed by the Montgomery County Public Schools in Maryland. Intended for personnel responsible for inservice

programming in local school districts, each manual can be used to conduct individual workshops or a one-semester inservice course of up to three credits. Topics include behavior management, individual and group counseling, curriculum development and instruction.

CONTACT: *Psychoeducational Resources, Inc.*  
*P.O. Box 306*  
*Burtonsville, MD 20730*  
*(301) 673-7040*

MAINSTREAM SPECIAL EDUCATION -- ISSUES AND PERSPECTIVES IN URBAN CENTERS

This publication provides all professionals (educators, administrators, planning and development personnel) in urban areas with an overview of issues and problems in special education mainstreaming in cities and also shares a variety of "proven" programs and systems already in use. Certain articles address the need for retraining (in some instances) teachers and other personnel and include some possibilities of, and recommendations for technical assistance. Cost: \$3.50.

CONTACT: *The Council for Exceptional*  
*Children*  
*1920 Association Drive*  
*Reston, VA 22091*  
*(800) 336-3728*

## PARENTS/PARENTAL INVOLVEMENT

CLOSER LOOK INFORMATION CENTER

Closer Look is a BEH project which provides practical advice on how to find educational programs and special services for

handicapped children and youth, Designed primarily to help parents, the program also helps practitioners obtain information to assist them in working with parents. Information packets containing background pamphlets, suggestions on steps to take to locate services, facts about laws affecting the handicapped, lists of helpful organizations, and other useful references are prepared in response to individual requests. All publications, the newsletter, and information packets are available free of charge. Letter inquiries are preferred, and to help Closer Look staff respond appropriately, parents are asked to describe their child's problem and the type of services or assistance needed.

CONTACT: *Closer Look Information Center*  
*P.O. Box 1492*  
*Washington, D.C. 20013*  
*(202) 833-4160*

NATIONAL ASSOCIATION FOR RETARDED CITIZENS RESEARCH AND DEMONSTRATION INSTITUTE

Three publications, accompanied by slides on parental and surrogate parent involvement in educating the severely retarded, are available from the Institute -- *The Right to Education, Classroom Programming, and The Partnership*. Together they provide basic information on special education laws, due process, individualized education programming, and the parent-teacher partnership.

CONTACT: *Kathy Moore*  
*NARC Research and Demonstration Institute*  
*2709 Avenue E East*  
*Arlington, TX 76010*  
*(817) 261-4961*

THE NATIONAL CONGRESS OF PARENTS AND TEACHERS (PTA)

The PTA is a volunteer organization whose mission is to improve the education and welfare of children and youth. Organized on the local, state, and national levels, the PTA functions as an advocacy organization, a service organization, and a parent education organization to fulfill its broad mission. The PTA and the National Foundation March of Dimes have united their efforts in a project on parenting. The goal is to make parents and educators aware of the importance of education for parenthood and family life in the curriculum of public schools. *The Fine Art of Parenting: A PTA Priority* (single copy free, 100 copies \$4.00) explains what a complete parenthood education program should include, discusses how to promote an effective parenting program, and presents supporting factual information on teenage pregnancies and family pressures in today's society.

CONTACT: PTA  
700 N. Rush Street  
Chicago, IL 60611  
(312) 787-0977

PARENT OBSERVATION IN THE CLASSROOM

This filmstrip is for staff of early childhood special education classrooms who are interested in learning how to involve parents in systematic observational activities. It offers methods for maximizing parent participation and can also be



used with parents of children with special needs. Cost: \$25.

CONTACT: *Chapel Hill Training  
Outreach Project  
Kaplan School Supply Co.  
600 Jonestown Road  
Winston-Salem, NC 27103  
(919) 768-4450*

SELECTED BIBLIOGRAPHY FOR AND ABOUT PARENTS OF THE HANDICAPPED

This bibliography describes a variety of print materials, many of which were written by parents. Topics include being the parent of a handicapped child, teaching suggestions, training guides for parents and other topics of interest to parents and teachers of handicapped children. Not all references deal specifically with the handicapped, but all were judged to be potentially useful for people who work with handicapped children.

CONTACT: *Connecticut State Department  
of Education  
Bureau of Pupil Personnel  
and Special Education  
Services  
Hartford, CT 06115  
(203) 566-4383*

SOUTHWEST EDUCATIONAL DEVELOPMENT LABORATORY (SEDL)

SEDL is a private non-profit research and development laboratory that works with local, regional, state and federal agencies to conduct research on the needs of multicultural populations, to develop programs to meet these needs, and to provide technical services and training.

The Parenting Materials Information Center (PMIC) gathers, analyzes and disseminates data on parenting resources and publications. The Center holds approximately 3,700 print and non-print materials on parenting, parent education, and parent involvement for parents and those who work with parents. *Parenting in 1977*, a catalog of these materials is available for \$5.00. All orders must be prepaid. The PMIC System for cataloguing and retrieving is designed to be easily installed by any agency or institution that works with parents. A free brochure provides more detailed information about PMIC.

CONTACT: SEDL  
The Division of Community  
and Family Education  
(DCAFE)  
211 East 7th Street  
Austin, TX 78701  
(512) 476-6861

## REGULAR CLASSROOM TEACHERS

### BEHAVIOR MANAGEMENT - A COMPETENCY-BASED MANUAL FOR INSERVICE TRAINING

This manual provides personnel responsible for inservice programming in local education agencies with a training approach intended to help teachers prevent and survive difficult encounters with student behavior. The authors also hope it will foster competencies to build such encounters into avenues for increased stability, trust, and self-esteem.

CONTACT: *Psychoeducational Resources,  
Inc.  
P.O. Box 306  
Burtonsville, MD 20730  
(301) 673-7040*

CLARIFICATION OF P.L. 94-142 FOR THE CLASSROOM TEACHER

Under a grant from the Bureau of Education for the Handicapped, Research for Better Schools, Inc. has prepared this guide to Public Law 94-142. It is especially designed to meet the needs of the regular classroom teacher. This field tested guide contains: a self-evaluation pretest; an explanation of the law, its background, purpose and major provisions; questions teachers most frequently ask regarding P.L. 94-142 and their answers; activities to help classroom teachers prepare themselves and their students for implementation of the law; highlights of the regulations; and a selected annotated bibliography. Cost: one copy, \$3.00; ten copies, \$27; fifty copies, \$125.

CONTACT: *Publication Office  
Research for Better  
Schools, Inc.  
1700 Market Street  
Philadelphia, PA 19103  
(215) 561-4100*

EXCEPTIONAL CHILDREN IN REGULAR CLASSROOMS

This publication is intended for regular education teachers, college and university administrators, and others who might at some point work with a child with special needs. Not only does it contain information regarding the handicapped

child in a regular classroom, it also addresses itself to the issues of: accommodation; individualized instruction; increasing educational services and opportunities for children with special needs; and outlines four models for providing the best possible services to these individuals. Cost: \$1.95.

CONTACT: *Department of Audio-Visual  
Extension  
University of Minnesota  
2039 University Ave., S.E.  
Minneapolis, MN 55455  
(612) 373-3810*

TEXAS TEACHER TRAINING PROGRAM (TTP)

The TTP is a multi-media, competency-based training program designed to assist regular classroom teachers at both the elementary and secondary levels in meeting the special needs of students. Specific directions for trainers are included with the package. Approximate cost: \$375 (production costs).

CONTACT: *Donroy Hafner, Director  
Institutional Services  
Educational Service Center  
Region XIII  
7703 North Lamar  
Austin, TX 78752  
(512) 458-9131*

## RESOURCE ROOMS

PROJECT CEC -- PHASE I  
EXEMPLARY ELEMENTARY SCHOOL RESOURCE ROOMS

A grant was initially written by the Massachusetts Federation Council for Exceptional Children to assist in developing



standards for resource rooms and to identify eight model resource rooms statewide. A sourcebook containing a description of the process used in determining the models, as well as a description of each of the eight model programs, is available free of charge. A slide-tape presentation is also available on loan. It is one hour in length and there is no rental fee.

CONTACT: *Anna Thorpe*  
*Project CEC -- Phase I*  
*5 Patany Road*  
*Framingham, MA 01701*  
*(617) 877-5361*

PROJECT CEC -- PHASE II  
EXEMPLARY MIDDLE SCHOOL/JUNIOR HIGH RESOURCE ROOM PROGRAMS

Project CEC -- Phase II, the second federally funded project written by the Massachusetts Federation Council for Exceptional Children, was designed to identify exemplary middle school/junior high school resource room programs. The programs submitted for consideration as models were evaluated in the following areas: classroom environment, learning environment, consultation, core evaluation process, individual educational plans, parent involvement and additional programming. A sourcebook is available at no charge, which includes an overview of the screening process, detailed program descriptions of the six models, outstanding program features of the eleven semi-finalists and a basic materials listing to assist professionals in establishing a resource room program at this level. A slide-

tape presentation is also available on loan, with no rental charge. A workshop presentation has been developed and is available for conferences, inservice training and teacher-training institutions.

CONTACT: *Susan Mandel*  
*Project CEC -- Phase II*  
*98 Barton Drive*  
*Sudbury, MA 01776*  
*(617) 443-3824*

## SEVERE SPECIAL NEEDS

### AMERICAN ASSOCIATION FOR EDUCATING THE SEVERELY AND PROFOUNDLY HANDICAPPED (AAESPH)

AAESPH publishes a variety of materials and provides information and referral for technical assistance. Publications include a monthly newsletter on all aspects of educating severely and profoundly handicapped children, including references to training materials and job opportunities. The Association also publishes a quarterly journal called *The AAESPH Review* that focuses on problems, research findings, trends and practices in the field.

CONTACT: *AAESPH*  
*1600 West Armory Way*  
*Gardenview Suite*  
*Seattle, WA 98119*  
*(206) 283-5055*

SECRETS FOR SURVIVAL

*Secrets for Survival* is a competency-based, multi-media training package for teachers of severely and profoundly handicapped children and adults. The six modules include: a rationale for serving severely and profoundly handicapped children in public schools; instructional arrangements for severely and profoundly handicapped children; assessing such children; curriculum and educational planning; behavior modification; and managing medical problems. Cost: \$330.

CONTACT: *Donroy Hafner, Director  
Instructional Services  
Educational Service Center  
Region XIII  
7703 North Lamar  
Austin, TX 78752  
(512) 458-9131*

STEP TO INDEPENDENCE: A SKILL TRAINING SERIES FOR CHILDREN WITH SPECIAL NEEDS

This set of illustrated manuals is designed to help parents and teachers teach skills in dressing, grooming, eating, housekeeping and caring for oneself. Suggestions for teaching early, intermediate and advanced self-help skills and dealing with behavior problems are included. The series employs a behavior modification framework and task analysis is explained.

Cost: \$21.95 (item #1720).

CONTACT: *Research Press  
P.O. Box 31772  
Champaign, IL 61820  
(217) 352-3273*

## SPEECH AND LANGUAGE DEVELOPMENT

### LANGUAGE SAMPLING, ANALYSIS, AND TRAINING: A HANDBOOK FOR TEACHERS AND CLINICIANS

This handbook provides information about an alternative method for the assessment and training of the language disordered child through the analysis of natural language samples. The book describes the collection and analysis of language samples and the subsequent development of an individualized training program. A glossary of linguistic and behavioral terms, references to additional sources of related information, appendices of detailed instructions, and a number of completed sample worksheets are also included. Cost: \$3.25.

CONTACT; *Consulting Psychologists Press*  
577 College Avenue  
Palo Alto, CA 94306  
(415) 326-4448

### MWM PROGRAM FOR DEVELOPING LANGUAGE ABILITIES

For the classroom teacher, MWM may be utilized as a remediation and a developmental program for children who need training in the twelve areas of language development outlined in the Illinois Tests of Psycholinguistical Abilities (ITPA): auditory reception, visual reception, auditory association, visual association, verbal expression, manual expression, auditory memory, visual memory, grammatic closure, visual closure, auditory closure, and sound blending. The kit contains a teacher's



guide; teaching manuals; and learning materials including pupil workbooks, records, picture cards, portrait cards, story books, and stimulus scenes. Cost: \$165.

CONTACT: *Educational Performance  
Associates  
563 Westview Avenue  
Ridgefield, NJ 07557  
(201) 941-1425*

SYSTEMS O.N.E. (ORIENTATION TO NORMAL ENVIRONMENT)

Intended for regular classroom teachers, resource specialists, administrators, special educators, parents and paraprofessionals, this sound-filmstrip kit is designed to aid in the integration of hearing impaired children into regular classrooms. Individual filmstrip topics include classroom management, peer orientation, classroom communication, family orientation, speech and language, reading, administrative guidelines and hearing aids. Cost; \$52.95.

CONTACT: *Educational Media Center  
207 Milton Bennion Hall  
University of Utah  
Salt Lake City, UT 84112  
(801) 581-6112*

## TESTING/PROGRAM EVALUATION

EDUCATIONAL TESTING SERVICE (ETS)

ETS maintains a reference library including both published and unpublished research instruments. A test bulletin is published on a quarterly basis (\$21 year) with up-to-date information

on new tests and references. ETS will provide upon request an annotated bibliography of tests in a particular area of interest. They do not provide copies of tests except in the case of *Tests in Microfiche* -- a collection of unpublished research instruments which are distributed on microfiche. The ETS collection includes research instruments in the areas of achievement, aptitude, personality, interests, attitudes and opinions, sensory-motor functioning and non-discriminatory assessment.

CONTACT: *Test Collection*  
*Educational Testing Service*  
*Princeton, NJ 08540*  
*(609) 921-9000*

TECHNIQUES OF NON-VERBAL TESTING

This twenty minute instructional film (16 mm) demonstrates the testing of handicapped children with non-verbal psychological tests. It can be useful for graduate level special education students and teachers. Information about other non-discriminatory types of assessments is included. Cost: \$5.00 rental fee.

CONTACT: *Krasker Film Library*  
*Boston University School*  
*of Education*  
*765 Commonwealth Avenue*  
*Boston, MA 02115*  
*(617) 353-3272*

## VOCATIONAL SPECIAL EDUCATION

PROJECT COPE (A CURRICULUM FOR LEARNING DISABLED HIGH SCHOOL STUDENTS  
DESIGNED TO MEET OBJECTIVES OF AN ADULT FUNCTIONAL COMPETENCY)

Within the overall secondary LD program in the Fairfax County Public Schools, Project COPE is developing multi-media instructional kits that enable high school LD students to gain the necessary skills for adult functional competency. The kits are based on 65 objectives contained in a listing of adult functional competencies that were devised by researchers at the University of Texas. These are grouped under five basic headings: occupational knowledge, consumer economics, health, government and law, and community resources. The kits are used by LD resource teachers who assist classroom teachers in mainstreaming LD high school students, and by staff of LD centers at which the more severely learning disabled receive instruction. The kits presently available are: *Budgeting; Money, Banks and Credit; Occupational Knowledge; Health, First Aid, and Safety; Travel and Transportation; Housing; Consuming Goods and Services; Government and Community Services; Family Living; Media Production Manual.* Cost information is available from the project.

CONTACT: Ms. Irene Nassor  
Project Director  
Project COPE  
6421 Meriwether Lane  
Springfield, VA 22150  
(703) 971-3475



## SECTION II

# Training Programs and Organizations





## ADAPTED PHYSICAL EDUCATION/PHYSICAL DEVELOPMENT

### AMERICAN CAMPING ASSOCIATION

The American Camping Association (ACA) is a professional organization of individuals involved in organized camping both summer and year-round for children, youths and adults. The Association sponsors certification and accreditation programs for camps in operation. The ACA provides information about camps and camping for all ages of handicapped individuals; however, this function is only part of its entire operation and is not the primary interest.

CONTACT: *American Camping Association  
Bradford Woods  
Martinsville, IN 46151  
(317) 342-8456*

### ADVENTURES IN MOVEMENT FOR THE HANDICAPPED

The purpose of Adventures in Movement (AIM) is to provide movement education for children with handicaps. AIM sponsors training programs nationwide for teachers in the AIM method of movement and encourages the teaching of movement to blind, deaf, retarded, crippled, and emotionally disturbed children. AIM also maintains its own Training Center in Dayton, Ohio for children who are preschool age or too severely handicapped to be in a school environment.

CONTACT: *Adventures in Movement for  
the Handicapped  
945 Danbury Road  
Dayton, OH 45420  
(513) 294-4611*

GIRL SCOUTS OF THE U.S.A. SCOUTING FOR HANDICAPPED GIRLS PROGRAM

The Scouting for Handicapped Girls Program is a special program of the Girl Scouts of the U.S.A. designed to integrate the handicapped girl into regular troop and camping activities. The national office provides fact sheets and guidelines on scouting for handicapped girls but is not involved in organizing or establishing special programs or activities. Individual leaders, however, may adapt activities to suit the abilities and limitations of handicapped girls within their own troops.

CONTACT: *GIRL SCOUTS OF THE U.S.A.  
Scouting for Handicapped  
Girls Program  
830 Third Avenue  
New York, NY 10022  
(212) 751-6900*

PROJECT ACTIVE (ALL CHILDREN TOTALLY INVOLVED IN EXERCISING)

A model kit and teacher training program were developed by the project to provide information about children with low motor ability, low physical vitality, postural abnormalities, nutritional deficiencies, learning disabilities, breathing problems, motor disabilities or limitations and communication

disorders. A project goal is to enable teachers to individualize and personalize their physical activity programs.

CONTACT: *Mr. Paul Porado*  
*Branch of Special Education*  
*and Pupil Personnel Services*  
*New Jersey State Department*  
*of Education*  
*or*  
*Dr. Thomas M. Vodola,*  
*Project Director*  
*Township of Ocean School*  
*District*  
*Dow Avenue*  
*Oakhurst, NJ 07755*  
*(201) 531-6600, ext. 365*

PROJECT ADVENTURE

Project Adventure is designed to add an experience component to standard high school and middle school courses. For many students, learning is essentially a passive process offering them little opportunity to take responsible action or to test abstract ideas in the real world. Project Adventure represents a combination of Outward Bound techniques and philosophy plus a humanistic group-process approach to learning and teaching. The project offers teacher training programs in both academics and physical education. These are intended to give teachers skills in program management, teaching strategies and techniques necessary for implementation.

CONTACT: *Project Adventure*  
*P. O. Box 157*  
*Hamilton, MA 01936*  
*(617) 468-1766*



## ADMINISTRATOR EDUCATION

### EDUCATIONAL LEADERSHIP APPRAISAL SEMINARS (ELA)

Conducted by the Educational Research Corporation, ELA seminars are designed to develop in school administrators at all levels, the skills that underlie educational leadership ability. These skills include time management, interpersonal and communication skills, problem solving and administrative skills (e.g., delegating effectively, planning, and organizing). Successful participants receive three graduate credits from Lesley College (course #ADMN 646). Cost: \$375 for a three-day seminar (includes lunches and materials).

CONTACT: Dr. Leonard Glick  
Director of Training and  
Technical Assistance  
Educational Research Corp.  
85 Main Street  
Watertown, MA 02172  
(617) 923-1710

## ARTS/ENVIRONMENTAL DESIGN

### \* ARTS AND HUMAN SERVICES PROJECT

Based at Massachusetts College of Art, the project is both a master's program in Education and Art, and an inservice training program for professionals, paraprofessionals, and parents in the applications of the arts, play, and design to challenges of multiple handicapped children and adults. Among the services the project provides are a reference

library and a three-week summer institute entitled *Human Services and Special Education: Solutions Through the Arts* for artists, art educators, classroom teachers and special educators. Two publications are also available: *Humanizing Environments -- A Primer*, and *Transforming Institutions With Play, the Arts, and Environmental Design*.

CONTACT: Elaine Ostroff or Carole May  
Massachusetts College of Art  
364 Brookline Avenue  
Boston, MA 02115  
(617) 731-2340, ext. 28

THE CULTURAL EDUCATION COLLABORATIVE

The Collaborative is a non-profit agency dedicated to the use of cultural organizations as educational resources by the broadest possible community. They conduct programs and provide services to cultural institutions and schools through a variety of training, planning, technical assistance and information-sharing activities. Of particular interest to those in special education are the collaborative's project in Career Education; project planning for greater accessibility to cultural organizations for handicapped people; and a computer-based information service called Culture Connection to help identify cultural organizations which offer special education programs. Subscribing educational organizations have unlimited access to Culture Connection's information about exhibits, collections, research activity, consultants, internships, workshops, performances, teaching kits and curriculum services. Costs vary

for these services.

CONTACT: *For Culture Connection:  
Mallory Diggs or Legare Cuyler  
Culture Connection  
164 Newbury Street  
Boston, MA 02116  
(800) 952-7433*

*For other Collaborative Services:  
Steve Marcus or Roger Cicchese  
The Cultural Education  
Collaborative  
164 Newbury Street  
Boston, MA 02116  
(617) 267-6254*

NATIONAL COMMITTEE ON ARTS FOR THE HANDICAPPED

The National Committee on Arts for the Handicapped has had experience in developing a process/concept model for implementing arts programs for handicapped persons, and is planning to adapt and refine the model for severely and profoundly handicapped children and youth. Project activities include the professional services of an artist to work directly with severely and profoundly handicapped children and youth at pilot sites, while demonstrating techniques for infusing the arts into the teaching of functional skills to teachers, parents and significant others.

CONTACT: *Wendy Perks, Director  
National Committee on Arts  
for the Handicapped  
A Model Program of Arts  
Suite 801  
1701 K Street, N. W.  
Washington, D.C. 20006  
(202) 223-8007,  
(night recording number  
223-8009)*

## BILINGUAL SPECIAL EDUCATION

### BILINGUAL SUPPORTIVE LEARNING CHILD SERVICE DEMONSTRATION CENTER (CSDC)

The Bilingual Supportive Learning Center is a project of the Puerto Rican Family Institute, a bilingual, bi-cultural agency that provides comprehensive social services to Hispanic families in New York City. The project offers a bilingual LD program to first and second graders who attend three schools. The LD resource rooms supplement the bilingual programs already established in each school. The CSDC staff has adapted screening tests and diagnostic instruments into Spanish, and has developed other assessment instruments for use with young bilingual Hispanic children.

CONTACT: Ms. Maria (Judy) Colon  
Puerto Rican Family Institute  
116 West 14th Street  
New York, NY 10011  
(212) 860-8939

### BOSTON UNIVERSITY BILINGUAL RESOURCE AND TRAINING CENTER

The Center provides technical assistance to bilingual educators in the planning, implementation, and development of programs for bilingual students. It offers mini-courses and workshops throughout the New England region on general topics in bilingual/bi-cultural education. Some of the courses offer credits through Boston University or cooperating state universities. Costs: unavailable.



CONTACT: *Boston University Bilingual  
Resource and Training Center  
School of Education  
765 Commonwealth Avenue  
Boston, MA 02115  
(617) 353-2827*

THE MULTILINGUAL MULTICULTURAL RESOURCE AND TRAINING CENTER

The Center is one of a network of centers throughout the country designed to meet the growing needs of bilingual/bi-cultural programs in schools. It provides: preservice and inservice training for all personnel involved in bilingual education (including special education personnel); a professional research and resource library of materials developed commercially and by Network Materials Development Centers available to educators on a loan basis; and a complete system of field testing new classroom materials for use with bilingual, bi-cultural students. There is no charge for any of these services.

CONTACT: *Maria Luisa Vallejo  
Resource Specialist in  
Bilingual Special Education  
The Multilingual Multi-  
cultural Resource and  
Training Center  
86 Fourth Street  
Providence, RI 02906  
(401) 331-3627*

NATIONAL ASSESSMENT AND DISSEMINATION CENTER (NADC)

NADC is one of forty-two centers across the country which form the National Bilingual Network. The Center maintains a

resource library of Title VII-produced materials, curriculum materials and commercially-developed resources in a wide variety of languages. (Most of these materials cannot be removed from the library.) A resource person is available to provide information on criterion and norm-referenced tests appropriate for bilingual students. They also publish a quarterly journal which includes reports on current research, teaching techniques, and other information available at \$1.50 an issue or \$5.00 a year.

CONTACT: *Nada Williston*  
*NADC*  
*Lesley College*  
*9 Mellon Street*  
*Cambridge, MA 02138*  
*(617) 492-0505*

## EARLY CHILDHOOD EDUCATION

### DALE AVENUE EARLY CHILDHOOD EDUCATION PROJECT

The Dale Avenue Project provides an ongoing needs assessment and skeletal curriculum for children in pre-kindergarten through third grade in the ten areas of: listening, naming, observing, speaking, writing and motor skills, perceptual motor skills, encoding/decoding, math, classification and seriation.

The Dale Avenue Project supports a wide variety of teaching styles, but room arrangement should allow for flexible

grouping and continuous regrouping. A new publication, *100 Sequential Skill Stations*, provides the teacher with instructions for making 100 learning stations which are keyed to specific performance objectives. Cost information for this publication can be obtained from the project and information about training can be obtained from the Massachusetts Diffusion Assistance Project (see p. 65).

CONTACT: *Helen B. Hanson*  
*Dale Avenue NDN Disseminator-Trainer*  
*319 Washington Street Mall*  
*Cape May, NJ 08204*  
*(609) 884-2092*

EARLY CHILDHOOD EDUCATION COURSE, OFFICE FOR CHILDREN

A thirty-hour course entitled *Preschool Children With Special Needs* is available to day care staff in the areas of Massachusetts where it is not offered at community and state colleges. The course is intended to aid in the integration of preschool children with special needs into regular educational settings. Cost: \$35 for ten sessions that are three hours each.

CONTACT: *Irma Napoleon*  
*Office for Children*  
*120 Boylston Street*  
*Boston, MA 02116*  
*(617) 727-8996*

## MAINSTREAMING

### EAST MOUNTAIN CENTER

The program at the East Mountain Center provides direct service to able and physically disabled children, and is also a demonstration and training resource for professionals, educators, students, and parents. Through workshops and seminars in integration, adaptive equipment, curriculum for disabled children, knowledge and understanding of disabilities, relating with parents of disabled children, psychological testing of the disabled child, setting up an environment and other areas, the center hopes to promote optimal care for disabled children in an integrated environment of able and disabled children. Different training and consultation options are available at varying costs.

CONTACT: *Pauline Curry*  
*East Mountain Center*  
*91 East Mountain Road*  
*Westfield, MA 01085*  
*(413) 568-0152*

## PARENTS AND PARENTAL INVOLVEMENT

### CENTER FOR PARENTING STUDIES

Training for parents, including those who have children with special needs, is provided through courses, workshops, school-based programs and lunch seminars for working parents. The center provides information about the process of parenting,



access to resources for parents as well as opportunities for parents to share with each other. The cost varies according to the format.

CONTACT: *Frances Litman, Director  
Center for Parenting Studies  
Wheelock College  
Long II, The Riverway  
Boston, MA 02115  
(617) 734-5200, ext. 191*

FEDERATION FOR CHILDREN WITH SPECIAL NEEDS

Member organizations that compose the federation are primarily groups of parents who have children with varying special needs. These groups include: the Association for Mentally Ill Children, the Massachusetts Association for Children with Learning Disabilities, the Massachusetts Association for Retarded Citizens, Parents and Friends of Cerebral Palsy and Multiply Handicapped, the Massachusetts Parents Association for Deaf and Hard of Hearing, the Massachusetts Spina Bifida Association and others. The Federation's Parent Center offers a resource library, legal information, referral services, advocacy information and training.

CONTACT: *Betsy Anderson  
Federation for Children  
with Special Needs  
120 Boylston Street, Suite 338  
Boston, MA 02116  
(617) 482-2915*

NEW MEXICO DEMONSTRATION PROGRAM FOR PARENTS

The University of New Mexico/Albuquerque Public Schools Model Demonstration Project for Parents assists parents to acquire information and skills necessary to be active participants in their children's education. A Parent Participation and Information Center operates in the Albuquerque Public Schools as well as in satellite centers in Gallup and Santa Fe, New Mexico, and Mesa, Arizona. Each site represents unique characteristics, i.e., large city, rural, small city and suburban communities with multi-cultural dimensions.

In addition, the Albuquerque Center develops and offers programs for parents, such as learning to be active participants in IEP conferences and learning behavior management techniques and communication skills.

CONTACT: *Dr. Roger Kroth, Director  
New Mexico Demonstration  
Program for Parents  
Parent Center  
1700 Pennsylvania Avenue  
Albuquerque, NM 87131  
(505) 292-0102*

UNIQUE COMMUNITY SERVICE PROJECT/CHILDREN'S PHYSICAL DEVELOPMENT CLINIC

The project develops individual programs for children and youth with special needs ranging in age from eighteen months through twenty years of age. Parent education seminars are conducted to give parents an opportunity to learn more about the educational needs of special needs children and of the

importance of play, motor development, physical education, recreation, and leisure time activities in the overall educational plan for their children. Guest speakers and films are utilized. Cost: \$25 per eight week session.

CONTACT: *Dr. Joseph H. Huber, Director  
Children's Physical Development Clinic  
Health and Physical Education Department  
Bridgewater State College  
Bridgewater, MA 02324  
(617) 697-8321, ext. 287-275*

## REGULAR CLASSROOM TEACHERS

### HUMAN GROWTH AND DEVELOPMENT CENTER

The Center provides on-site inservice training for elementary and secondary classroom teachers in public schools that is patterned in response to the requirements of Chapter 766 and P.L. 94-142. Three different program models are offered, each consisting of a series of workshops on teacher attitudes, knowledge and skills related to students with special needs in regular classrooms. Details of each program are tailored to meet the specific needs of the training audience with each program including five, monthly, three hour workshops. A limited number of school districts may participate in the program for the cost of materials (\$50 per teacher participant) with a minimum of 45 participants.

CONTACT: Gary Siperstein  
Human Growth and Development Center  
University of Massachusetts/  
Boston  
100 Arlington Street  
Boston, MA 02125  
(617) 287-1900, ext. 323

PROJECT CHARTS: CHANGING ACHIEVEMENT RATES OF TEACHERS AND STUDENTS

The overall goal of Project CHARTS is to develop a model in which ongoing research using Applied Behavior Analysis (ABA) forms the basis for developing instructional techniques. Two demonstration classrooms at the University of Washington's Experimental Education Unit are involved in the development of instructional packages for LD students ranging in age from 8-13. Following development, these packages are field tested in ten public school classrooms in four local school districts. Current instructional packages include: *Charting Conventions; B-D Reversals; How Much Time; Student Progress Inventory; Tactics for Math Proficiency; Story Problems I; Charting Practice.* Parent programs focus on training parents to work with their children on reading and spelling skills. The project staff conducts curriculum research using an ABA approach on decoding writing, spelling and basic math skills.

CONTACT: Dr. Tom C. Lovitt, Director  
Ms. Kathy Fantasia, Coordinator  
Project CHARTS  
Experimental Education Unit  
University of Washington,  
WJ-10  
Seattle, WA 98095  
(206) 543-4011, ext. 300



PROJECT EXPAND

Project Expand trains LD specialists and classroom teachers throughout Ohio to use the model program it has developed for serving secondary school LD students. This model program offers students intervention through learning centers and regular classrooms. It also features pre-vocational and pre-collegiate training for LD students, and a program to reinforce classroom instruction through the use of volunteer aides and peer tutors.

A project of the State of Ohio -- Department of Education -- Project Expand is headquartered in the Division of Special Education. The project has developed a number of materials available for use by regular teachers. These include:

*Circumventive Teaching Handbook; The Learning Center Model; Regular Education Inservice Handbook; Volunteer Aide/Peer Tutoring Guide.* Cost information may be obtained directly from the project.

CONTACT: Ms. Shirley Moorehead  
Project Director  
Project Expand  
933 North High Street  
Worthington, OH 43085

## SEIZURE DISORDERS

EPILEPSY SOCIETY OF MASSACHUSETTS, INC.

The society provides workshops on seizure disorders and helps to obtain medical services for children with epilepsy. A

pamphlet is available which provides answers to some questions frequently asked about epilepsy.

CONTACT: *Edward Shaw, Director  
Epilepsy Society of  
Massachusetts, Inc.  
3 Arlington Street  
Boston, MA 02116  
(617) 267-4341*

## SEVERE SPECIAL NEEDS

CHIEF SPECIAL SERVICE BRANCH/DIVISION OF ASSISTANCE TO STATES (DAS)/  
BUREAU OF EDUCATION FOR THE HANDICAPPED (BEH)

The Chief Special Service Branch conducts workshops on mainstreaming the severely handicapped student. The materials used in these workshops would be useful in preparing IEPs for the severely handicapped and are available for dissemination.

CONTACT: *Paul R. Thompson  
Chief Special Service  
Branch/DAS/BEH  
400 Maryland Avenue, S.W.  
Donohoe 4046  
Washington, D.C. 20202  
(202) 472-4825*

## VOCATIONAL SPECIAL EDUCATION

ALPHA-UNICORN

This project provides technical assistance on a statewide basis to local schools in many areas that are related to vocational special education. Program planning and evaluation,

short and long term inservice training of vocational special education personnel, proposal development, and student advocacy are examples of the types of services provided by Alpha-Unicorn.

CONTACT: *Alpha-Unicorn*  
*30 Main Street*  
*Office No. 5*  
*Ashland, MA 01721*  
*(617) 881-2544*



## **SECTION III**

### **Resource Centers/General Sources of Information and Training**





BOSTON UNIVERSITY DEPARTMENT OF SPECIAL EDUCATION INSERVICE TRAINING UNIT

The unit offers workshops directed to the process of resolving the problems that arise in the classroom. These workshops have been presented to teachers, parents and administrators with varying focuses. The workshop for teachers addresses the use of economical problem-solving strategies that can be used in the classroom. The workshop for parents prepares them to communicate more effectively with the school by making observations of children's behavior in the home and sharing these with teachers. The workshop for administrators presents a method of making observations in class and sharing these with teachers in the course of supervision. Course time varies from six to twelve hours divided into two to six sessions, with fees ranging from \$600 to \$1200. Staff members are also prepared to consult with school officials who wish to develop their own training programs.

CONTACT: Dr. Jonathan Clark  
Boston University  
School of Education  
765 Commonwealth Avenue  
Boston, MA 02215  
(617) 353-3077

CENTER FOR INNOVATION IN TEACHING THE HANDICAPPED (CITH)

CITH is a research and development facility funded by the Bureau of Education for the Handicapped. Its focus in recent years has been on the design, development, and systematic evaluation of instructional materials for teacher trainers

and preservice and inservice teachers of mildly handicapped children. For information about the kinds of training materials that can be purchased from CITH, a publications list and directory of training materials is available from the address below. *The Directory of CITH Training Materials* contains information on a variety of games, simulations and multi-media packages designed by CITH for use with preservice and inservice teachers. Costs vary.

CONTACT: *Center for Innovation  
in Teaching the  
Handicapped  
School of Education  
Indiana University  
2805 East Tenth Street  
Bloomington, IN 47401  
(812) 337-5847*

CENTER ON HUMAN POLICY

The Center on Human Policy is a Syracuse University based advocacy organization involved in the national movement to insure the rights of people with special needs. The Center is committed to fundamental social change in the areas of education, vocational and rehabilitative programming and residential services for people with disabilities. A major focus of the organization is on community organizing: helping consumers act on their own behalf to obtain their rights. The Center engages in legal advocacy, assists consumer groups in efforts to monitor residential, educational and rehabilitative programs to insure the accountability of service providers and

sponsors workshops and training sessions in areas of concern. Center staff work with community groups, train local and national community leaders, distribute organizing materials and support activist groups in other ways.

In addition, the Center publishes multi-media resources (children's books, educator's guides, posters, slide shows, and books) in a wide variety of areas related to special education through the Human Policy Press. Some of these areas include mainstreaming, "handicapisms" (prejudices, stereotyping and discrimination practiced against people with disabilities), advocacy and teaching techniques.

CONTACT: *Center on Human Policy  
Syracuse University  
216 Ostrom Avenue  
Syracuse, NY 13210  
(315) 423-3851*

COUNCIL FOR EXCEPTIONAL CHILDREN (CEC)

The Information Services and Public Sales office maintains a large variety of materials for teachers, administrators, parents and others. An updated listing can be found in the current *CEC Catalog (year) -- Publications and Non-print Media* available from the membership/subscription unit at the CEC address. A sample of titles includes: *Exceptional Children Education Resources*, *Primer on Individualized Education Programs for Handicapped Children*, *Teaching Exceptional Children in All America's Schools*, and *Instructional Alternatives for Exceptional Children*. Cost for publications and



non-print media vary and are listed in the catalog. CEC's monthly newsletter, *Insight*, is also available for \$20 a year.

In addition to these services, the CEC Center provides assistance to state departments of education, school districts, universities and any other groups or individuals concerned about exceptional persons, through a vast array of services and products. These include consultant services, the development of media packages, short term projects to achieve specific objectives, institutes, workshops, customized conferences, information services and successful classroom techniques.

CONTACT: *The CEC Center  
1920 Association Drive  
Reston, VA 22091  
(800) 336-3728*

ERIC CLEARINGHOUSE ON HANDICAPPED AND GIFTED CHILDREN

This comprehensive information center has information on virtually all aspects of the education of handicapped and gifted children. Specific areas of interest include career education, counseling and personnel services, early childhood education, educational management, testing, measurement and evaluation, urban education, small schools and numerous others.

CONTACT: *ERIC Clearinghouse on  
Handicapped and Gifted  
Children  
1920 Association Drive  
Reston, VA 22091  
(800) 336-3728*

JAMAICA PLAIN OUTREACH PROGRAM

This community mental health program is composed of highly mobile, interdisciplinary teams (e.g., family, adolescent, Hispanic). In addition to its full range of clinical mental health services, client advocacy, service coordination and referral, the Program conducts 766 evaluations, crisis intervention and an early prevention screening program. Clinical services are available to any Jamaica Plain resident free of charge. The program also provides a variety of training, case and program consultation services to schools and classrooms, social and mental health service programs, and community groups. These services are custom-tailored to the special needs of consultees, and fees are prorated or free according to the consultee's capacity to pay. The Hispanic team, composed of psychologists and psychiatric social workers, is integrated into the full range of services provided by the Outreach Program, and available for consultation requests that meet the same criteria.

CONTACT: *Yohel Camayd-Freixas*  
*Jamaica Plain Outreach Program*  
*20 Barbara Street*  
*Jamaica Plain, MA 02130*  
*(617) 524-6319*

MASSACHUSETTS DEPARTMENT OF EDUCATION

The central office in Boston and the six regional education centers across the state, are able to provide a variety of services and resources to special educators in Massachusetts.

Each regional center has training materials available for examination at the center or on a short-term loan basis. These include video tapes such as the Lexington Teacher Training Project tapes, teacher's guides and other publications. Special education staff members in regional centers and the central office provide technical assistance to schools improving their special education programs, conduct workshops and training sessions for teachers and administrators, and are able to refer people with specific training needs to a variety of other resources. In addition to core special education staff members, staff associated with a number of temporary federally-funded special education projects (listed below) have a very specific area of expertise, and can also be a good resource to school personnel with various training needs. For more specific information about available training resources, contact the regional office or the special project listed below:

*Greater Boston Regional Education Center*

*54 Rindge Avenue Extension  
Cambridge, MA 02140  
(617) 547-7472*

*Contact Person: Larry Hardison*

*Springfield Regional Education Center*

*155 Maple Street  
Springfield, MA 01105  
(413) 739-7271*

*Contact Person: Dan Burke*

*Southeast Regional Education Center*

*P.O. Box 29  
Middleboro, MA 02346  
(617) 947-3240*

*Contact Person: Benoit Charland*

*Central Massachusetts Regional Education Center*

*Beaman Street, Route 140  
West Boylston, MA 01583  
(617) 835-6267*

*Contact Person: Jim Fitzpatrick*

*Northeast Regional Education Center*

*Danvers State Hospital  
Harrington Building  
Gregory Street  
Middleton, MA 01949*

*(617) 777-3500, 3501, 3502  
Contact Person: Bill Ferris*

*Pittsfield Regional Education Center*

*188 South Street  
Pittsfield, MA 01201  
(413) 499-0745*

*Contact Person: Don Sommer*



These temporary federally-funded special education projects are located at the Massachusetts Department of Education, Division of Special Education, 31 St. James Avenue, Boston, MA 02116:

*Bilingual Special Education Project*  
*Patricia Landorand (617) 727-5770*

*State-Wide Project for the Education of the Hearing Impaired*  
*Rip Vanasse (617) 727-5770*

*Special Education Manpower Project*  
*Cynthia Gilles (617) 727-5770*

*Statewide Early Childhood Project*  
*Charlene Imhoff (617) 727-5770*

*Boston Project*  
*David Riley (617) 727-5770*

*Urban Information Project*  
*Nelly Sepulveda Rathmill*  
*(617) 727-8534*

*E. T. Liaison Project*  
*George Christin (617) 426-1520*

*Statewide Program for Priority Populations*  
*Hall Gibber (617) 727-5530*

*Child Search*  
*Meredith Richardson (617) 727-5440*

*Comprehensive Secondary School Planning Project*  
*Judy Riegelhaupt (617) 727-5440*

MASSACHUSETTS DIFFUSION ASSISTANCE PROJECT (MDAP)

MDAP is the National Diffusion Network's state facilitator project in Massachusetts. Its primary goal is to help local schools make program improvements. MDAP operates on the basis of a diffusion strategy that links local schools to some of the most successful educational programs in the country: educational programs that work. Through MDAP, school districts receive direct assistance and training in the selection, adoption and installation of these proven programs and practices.

CONTACT: *John J. Collins, Project Director*  
*The NETWORK*  
*290 South Main Street*  
*Andover, MA 01810*  
*(617) 470-1080*



MEDIA RESOURCE CENTER

The Media Resource Center is a training resource and technical assistance center jointly sponsored in 1977-1978 by the Massachusetts Department of Mental Health and the Massachusetts Department of Public Health. The center provides resources and support services to families of, and individuals serving persons with special needs. The three components of the center are: media production, the resource library and the instructional materials workshop. It is located on the grounds of the Walter Fernald State School in Waltham.

CONTACT: *Media Resource Center  
Walter Fernald State School  
200 Trapelo Road  
Waltham, MA 02154  
(617) 891-7178*

MERRIMACK EDUCATION CENTER (MEC)

MEC provides a variety of services to educators, some of which are specifically geared to people in special education. In terms of training information and materials, the Lexington tape series entitled *Integration of Children with Special Needs in a Regular Classroom* is available and there are viewer's guides for each program in the series. Through their computer searching capability, MEC also has access to a lot of written information about training programs and materials. In terms of training programs, MEC offers a field-based masters degree program in severe special needs, in cooperation with Fitchburg State College. This is a 33 credit program specifically intended for

teachers who are providing services to the severely and profoundly handicapped. It is a part-time program designed to be completed in two years. Additional services are geared to the needs of member school districts and other clients but include consultation, tailored in-service training, technical assistance, workshops and conferences. Costs vary.

CONTACT: *Helen Doyle (materials)*  
or  
*Elaine Francis (program coordinator)*  
*Merrimack Education Center*  
*101 Mill Road*  
*Chelmsford, MA 01824*  
*(617) 256-4553*

NATIONAL ASSOCIATION OF STATE DIRECTORS OF SPECIAL EDUCATION (NASDSE)

NASDSE (pronounced "nasdee") offers inservice training and a variety of publications to serve the needs of educators who occupy positions of leadership in providing special education programs within their states. Workshops addressing all aspects of the IEP process are conducted for state departments of education, local education agencies and school districts to train individuals who will be responsible for training others at the local school level. Publications are designed to assist in the development and implementation of IEPs under Public Law 94-142.

CONTACT: *Elaine Braslow*  
*NASDSE*  
*1201 Sixteenth Street*  
*N.W., Suite 610 E*  
*Washington, D.C. 20036*  
*(202) 833-4193*

NATIONAL CENTER, EDUCATIONAL MEDIA AND MATERIALS FOR THE HANDICAPPED (NCEMMH)

NCEMMH, formerly a project sponsored by the Bureau of Education for the Handicapped, now continues under the auspices and support of the Ohio State University, College of Education to assist special educators and parents in planning educational programs for exceptional children. The National Center is concerned with the following types of media and materials: a variety of audiovisual educational media such as films, recordings, slide tapes, video tapes, models, instructional kits, or programs for teaching machines; other nonprint or mixed media items such as educational games or film-plus-book sets; books and other printed matter. Many of the products and services are offered through the use of the National Instructional Materials Information System -- NIMIS -- a data base containing over 36,000 abstracts on materials useful in educating exceptional children. In addition to NIMIS information, a *National Catalog of Films in Special Education* (\$7.95), and a bibliography series of more than 1700 programs and materials (\$59.00 for the set of 26 bibliographies) are available as well.

CONTACT: NCEMMH  
The Ohio State University  
Columbus, OH 43210  
(614) 422-7596

NATIONAL INFORMATION CENTER FOR SPECIAL EDUCATION MATERIALS (NICSEM)

NICSEM was funded by the Bureau of Education for the Handicapped beginning October 1, 1977. The central task of the



project is to continue the development of a national bibliographical information retrieval system focusing on educational objectives and materials for the handicapped. Located at the University of Southern California, NICSEM incorporates the informational components of the National Instructional Materials Information System -- NIMIS I -- which identifies more than 36,000 media and materials useful for educators of exceptional children. The major services provided by NIMIS/NICSEM include: a master catalog of special education materials from the NIMIS I data base, indexes organized by handicapping condition as well as staff training materials and a catalog of special education non-print from the NICSEM data base; all in both microfiche and book form. Prices vary.

CONTACT: *University of Southern  
California  
NICSEM  
University Park (RAN)  
2nd Floor  
Los Angeles, CA 90007  
(800) 421-8711*

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

The National Institute of Child Health and Human Development (NICHD) supports, fosters and coordinates research and training in areas relating to maternal health, child health, human development and population, focusing not on any one disease or part of the body but on the continuing process of growth and development, biological and behavioral, from reproduction and prenatal development, through infancy and



childhood and on into maturation and aging. The Institute collects and disseminates research information related to its area of interest and provides research project grants to public and private institutions and individuals, as well as training grants and awards. Information is particularly strong on research relating to Down's syndrome, mental retardation, speech and language and speech and reading.

CONTACT: *National Institutes of Health  
Department of Health,  
Education, and Welfare  
Bethesda, MD 20014  
(301) 496-5133*

#### THE NETWORK

The NETWORK is a non-profit educational service and research organization that has been working with local school districts and other educational organizations in Massachusetts, New England and across the nation since 1969. The NETWORK designs and conducts workshops for administrators, teachers, and other educators and offers consultation services to individual schools, districts or other agencies. These services range from one day inservice events to long-term consultation and focus on such issues as management, planning and evaluation, development of IEPs, staff development, staff evaluation, and curriculum and product development. Costs vary.

CONTACT: *The NETWORK  
290 South Main Street  
Andover, MA 01810  
(617) 470-1080*

OFFICE FOR CHILDREN

The Office for Children offers a variety of services to parents and teachers of children with special needs. Their Help for Children (HFC) Program is an information, referral, follow-up, and advocacy service organizing a large network of health, education, social services, recreational and governmental resources for children. There are forty-one area offices throughout the state.

For parents whose children are being evaluated for special services, 766 Advocates trained by the Office for Children, can provide information, supportive and referral services. These Advocates work to insure that the requirements of Chapter 766 are followed and that the parent's and the child's rights are not violated during the core evaluation process. Several videotapes, 45 minute dramatizations of various parts of the 766 process, suitable for all audiences are available: *The Core Evaluation*, *The 766 Mediation Session* and *The 766 Appeal Hearing*.

Another service from the Office for Children is Project Children at Risk: Abuse and Neglect. The project is involved in advocacy, planning, coordination between agencies, training, and community awareness of child abuse through the forty-one local Councils for Children across Massachusetts.

The local Councils for Children are the most direct way for people to access these services. Listed below are the seven regional addresses for the Office for Children who can direct you to the closest local council.

Region I

Office for Children  
1618 Main Street  
Springfield, MA 01103  
(413) 733-4161

Region II

Office for Children  
75A Grove Street  
Worcester, MA 01605  
(617) 791-3136 or  
(617) 727-8773 (Boston  
exch.)

Region III

Office for Children  
Gregory Street  
Middleton, MA 01949  
(617) 774-2396,  
(617) 727-8787

Region IVA

Office for Children  
Metropolitan State Hospital  
475 Trapelo Road  
Building H  
Waltham, MA 02154  
(617) 891-7021, 727-1429,  
727-7679

Region IVB

Office for Children  
1001 Watertown Street  
West Newton, MA 02165  
(617) 727-2532

Region V

Help for Children  
Lakeville Hospital  
Lakeville, MA 02346  
(617) 947-1231, ext. 2

Region VI

Help for Children  
120 Boylston Street  
Boston, MA 02116  
(617) 727-8898,  
8367, 6804

Also Contact:

766 Coordinator  
Office for Children  
120 Boylston Street  
Boston, MA 02116

WESTERN MASSACHUSETTS TRAINING CONSORTIUM, INC.

The Consortium was created to offer support and nurturance to people in human service agencies who seek to meet the needs of the mentally ill, developmentally disabled and other multiply handicapped both in the community and in institutions. The Consortium coordinates a number of inter-agency and multidisciplinary pilot projects located primarily in western and

central Massachusetts. Among the projects funded in FY'78 are: the Continuing Education Project, providing comprehensive clinical and administrative training for providers in a variety of sites; the Arts and Human Services Project (see p. 42); the Northampton State Hospital Project; early intervention projects involving the Media Resource Center (see p. 66) and a number of others. The staff at the Consortium has had extensive experience in the area of services for young children with several special needs, birth to age three and works continuously with the major human service agencies in the Commonwealth (Departments of Mental Health and Public Health, University of Massachusetts Medical Center, and other).

CONTACT: *Catherine Schlater*  
*Director*  
*Western Massachusetts*  
*Training Consortium*  
*22 Trowbridge Road*  
*Worcester, MA 01609*  
*(617) 856-3742 or 3400*





## **SECTION IV**

# **Training Programs Offered by Massachusetts Colleges and Universities**





SPECIAL EDUCATION TRAINING PROGRAMS OFFERED  
BY MASSACHUSETTS COLLEGES AND UNIVERSITIES

A. KEY TO TYPE OF PROGRAM OR COURSE WORK OFFERED

ADM -- Administrator of Special Education  
GEN -- Generic Special Teacher of School Age Children with Mild Special Needs  
MOD -- Teacher of School Age Children with Moderate Special Needs  
SEV -- Instructor of School Age Children with Severe Special Needs  
VIS -- Teacher of School Age Children with Sensory Handicaps: Vision  
AUD -- Teacher of School Age Children with Sensory Handicaps: Audition  
SP -- School Psychology  
PER -- Peripatologist  
SH -- Speech and Hearing  
SPA -- Speech Pathology and Audiology  
ECE -- Early Childhood Special Education  
VOC -- Vocational Special Education  
APE -- Adapted Physical Education  
OT -- Occupational Therapy  
PT -- Physical Therapy  
REG -- Regular Education/Special Education  
GC -- Guidance and Counseling  
BIL -- Bilingual Special Education  
REC -- Therapeutic Recreation

Important: *Italics* denote approved programs audited by the Massachusetts Department of Education leading to approval of special needs personnel as of January, 1979. Programs at some colleges and universities have yet to be approved. The Bureau of Teacher Certification, Massachusetts Department of Education at 31 St. James Avenue, Boston, MA 02116 (617/727/5726) has the most up-to-date information regarding approved programs. The first six areas in the above list (ADM, GEN, MOD, SEV, VIS, AUD) are the only areas for which the Department of Education, Bureau of Teacher Certification currently offers approval.\*\*



B. KEY TO LEVEL OF PROGRAM OR COURSE WORK OFFERED

x -- Course work (graduate or undergraduate)

u -- Undergraduate program

g -- Graduate program

l -- License program

d -- Being developed

<i>COLLEGE OR UNIVERSITY</i>	<i>TYPE AND LEVEL OF PROGRAM</i>				
American International College 170 Wilbraham Road Springfield, MA 01109 (413) 737-5331	<i>MOD</i> x,u,g	<i>SEV</i> x	<i>ADM</i> x	<i>REG</i> x	
	<i>GEN</i> g				
Anna Maria College Paxton, MA 01612 (617) 757-4586	<i>MOD</i> x	<i>SH</i> x	<i>REG</i> x		
Assumption College 500 Salisbury Street Worcester, MA 01609 (617) 752-5615	<i>GEN</i> x	<i>MOD</i> g,l	<i>SP</i> x	<i>REG</i> x	<i>GC</i> x
Boston College Department of Rehabilitation and Special Education Chestnut Hill, MA 02167 (617) 969-0100, ext. 4180	<i>GEN</i> x,g	<i>MOD</i> x,u,g	<i>SEV</i> x,g	<i>VIS</i> x,g	<i>ADM</i> x,g,l
	<i>SP</i> x	<i>PER</i> x	<i>VOC</i> d	<i>REG</i> x	<i>GC</i> x
Boston State College 625 Huntington Avenue Boston, MA 02115 (617) 731-3300	<i>GEN</i> x,g,l	<i>MOD</i> x,g,l	<i>SP</i> x	<i>APE</i> x	<i>GC</i> x
Boston University Special Education Department 765 Commonwealth Avenue Boston, MA 02215	<i>GEN</i> x	<i>MOD</i> x,u,g	<i>SEV</i> x,u,g	<i>AUD</i> x	<i>ADM</i> x
	<i>SP</i> x	<i>SH</i> x	<i>SPA</i> x	<i>VOC</i> x	<i>OT</i> x
	<i>PT</i> x	<i>REG</i> x	<i>GC</i> x	<i>BIL</i> d	<i>REC</i> x
Bridgewater State College Special Education Department Bridgewater, MA 02324 (617) 697-8321	<i>GEN</i> x	<i>MOD</i> x,u,g	<i>APE</i> x		<i>GC</i> x
Clark University 950 Main Street Worcester, MA 01610 (617) 793-7177	<i>MOD</i> x,u	<i>BIL</i> d			
Curry College Milton, MA 02186	<i>MOD</i> x,u	<i>ECE</i> x	<i>REG</i> x		

<i>COLLEGE OR UNIVERSITY</i>	<i>TYPE AND LEVEL OF PROGRAM</i>					
Eastern Nazarene College 23 East Elm Avenue Wollaston, MA 02170 (617) 773-6350	MOD x	REG x				
Emanuel College 400 The Fenway Boston, MA 02115 (617) 277-9340	MOD x	SH x	REG x			
Emerson College Department of Communication Disorders 168 Beacon Street Boston, MA 02116 (617) 536-7255	SH x					
Fitchburg State College Department of Special Education 160 Pearl Street Fitchburg, MA 01701 (617) 345-2151	<i>GEN</i> <i>g, l</i>  VOC x	<i>MOD</i> <i>u, g, l</i>	SEV d	PER x	ECE x	
Framingham State College Department of Education 100 State Street Framingham, MA 01701 (617) 872-3501	<i>GEN</i> <i>x, g, l</i>	REG x	GC x			
Gordon College 255 Grapevine Road Wenham, MA 01984 (617) 927-2300	REG x					
Lesley College 29 Everett Street Cambridge, MA 02138 (617) 868-9600	<i>GEN</i> <i>x, g, l</i>  REG x	<i>MOD</i> <i>x, u, g</i>  GC x	<i>SEV</i> <i>g</i>  BIL d	ADM x	ECE x	
Massachusetts College of Art 364 Brookline Avenue Boston, MA 02215 (617) 731-2340	MOD x	SEV x				
Massachusetts Maritime Academy Buzzards Bay, MA 02532 (617) 759-5761	MOD x	REG x				

<i>COLLEGE OR UNIVERSITY</i>	<i>TYPE AND LEVEL OF PROGRAM</i>					
North Adams State College Church Street North Adams, MA 01247 (413) 664-4511	ECE x	REG x				
Northeastern University Robinson Building-Special Education 360 Huntington Avenue Boston, MA 02115 (617) 437-2492	MOD g	SEV g	ADM x	SP x	SH x	
Our Lady of the Elms College Continuing Education Chicopee, MA 01013 (413) 598-8351	ECE x	REG x				
Regis College Graduate Special Education Weston, MA 02193 (617) 893-1820, ext. 240	GEN x,g,l	MOD x,g,l	REG x			
Salem State College Salem, MA 01970 (617) 745-0556	ECE x	REG x				
Simmons College Special Education 300 The Fenway Boston, MA 02115 (617) 738-2157	GEN x,g,l	MOD x,u,g	PT x	BIL d		
Smith College Clark School for the Deaf Morgan Hall Northampton, MA 01063 (413) 584-2700, ext. 413	AUD x					
Springfield College 268 Alden Street Springfield, MA 01109 (413) 787-2100	SEV x	APE x	REC x			
Suffolk University 41 Temple Street Boston, MA 02114 (617) 723-4700	GEN d	MOD g,l	ECE d	GC x		
Tufts University Department of Child Study Medford, MA 02155 (617) 628-5000	GEN d	MOD g	SP x	ECE x	OT x	GC x



<i>COLLEGE OR UNIVERSITY</i>	<i>TYPE AND LEVEL OF PROGRAM</i>					
University of Massachusetts/Amherst* School of Education Amherst, MA 01002 (413) 545-0111	<i>GEN</i> <i>g</i>	<i>MOD</i> <i>g</i>	SEV x	ADM x	SPA x	ECE x
	VOC d	APE x				
Westfield State College Western Avenue Westfield, MA 01085 (413) 568-3311	<i>MOD</i> <i>u, g, l</i>	ADM x	SP x	VOC d		
Wheelock College** Graduate Special Education 200 The Riverway Boston, MA 02215 (617) 734-5200, ext. 188	<i>MOD</i> <i>x, u</i>	ECE x				
Worcester State College 486 Chandler Street Worcester, MA 01602 (617) 754-6861	<i>GEN</i> <i>g, l</i>	SP x	SH x	ECE x	REG x	

\*Not admitting new students into the approved programs listed.

\*\*On September 1, 1979, regulations for a new teaching certificate, Teacher of Young Children With Special Needs, will become effective. Wheelock College has audited undergraduate and graduate programs which will lead to this certificate. Further information about this certificate is available from the Bureau of Teacher Certification, Massachusetts Department of Education, upon request.

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For more information, contact the Massachusetts Dissemination  
Project or one of the Regional Centers listed below:

Charles Radlo  
Central Massachusetts Regional Center  
Beaman Street, Route 140  
West Boylston, MA 01583  
(617) 835-6267

Paul Francis  
Southeast Regional Center  
Lakeville State Hospital  
P.O. Box 29  
Lakeville, MA 02346  
(617) 947-3240

Don Geer  
Pittsfield Regional Center  
188 South Street  
Pittsfield, MA 01201  
(413) 499-0745

Maria Grasso  
Northeast Regional Center  
Danvers State Hospital  
Harrington Building  
Gregory Street  
Middleton, MA 01949  
(617) 777-3500, 3501, 3502

Barbara Ramsdell  
Greater Boston Regional Center  
54 Rindge Avenue Extension  
Cambridge, MA 02140  
(617) 547-7472

Jeannette Harris  
Springfield Regional Center  
155 Maple Street  
Springfield, MA 01105  
(413) 739-7271

# Resources For Schools...



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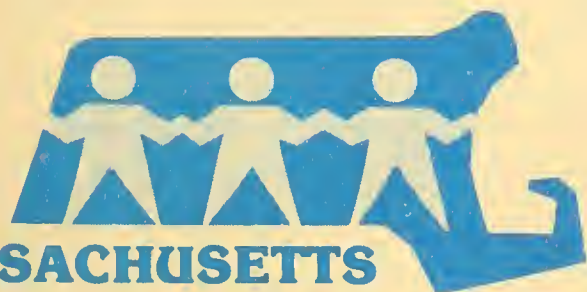
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## 10. A RESOURCE GUIDE FOR THE EDUCATION OF GIFTED AND TALENTED STUDENTS



MASSACHUSETTS  
DISSEMINATION  
PROJECT

SPRING 1979



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# 10. A RESOURCE GUIDE FOR THE EDUCATION OF GIFTED AND TALENTED STUDENTS

DEVELOPED AND PUBLISHED JOINTLY BY:

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Resources for Schools is a series of publications developed by the Massachusetts Dissemination Project (MDP) for Massachusetts educators, parents, and students. The project, funded by the National Institute of Education, has four major goals:

- to stimulate greater awareness of the resources available to Massachusetts schools;
- to provide educators, parents, and students with specific information about resources and materials for school programs and services;
- to assist regional education centers and the Department to increase and improve information and dissemination services to educators, parents, and students in the state;
- to encourage greater exchange and sharing of resources among educational organizations, service providers, the Department of Education and its regional education centers, and school personnel.

The project is located in the Department's Boston office. In addition, each regional center has designated a staff member who maintains continuous contact and involvement with project activities across the state, and is responsible for working with center staff to improve information and dissemination services in the center. Ultimately, the regional centers will function as switchboards -- sometimes providing services directly to schools, other times connecting them with the many existing resources. The development of this series -- as its name suggests -- is one way the project is helping make these connections. *Please contact a member of the project staff for more information about the series, the project or the regional center nearest you.*

Resources for Schools presently available:

1. A Catalog of Publications from the Massachusetts Department of Education (being revised)
2. Video Tapes for Teaching (being revised)
3. A Guide to Dissemination Agencies (being reprinted)
4. Community Involvement in Your School: A Guide to People, Programs and Publications
5. The Student's Guide to Special Education (being reprinted).
6. Implementing Chapter 622: Exemplary Programs for Alleviating Racism and Sexism in Massachusetts Schools
7. Competency Programs for Basic Skills Improvement: A Resource Guide
8. A Review of Massachusetts Statewide Assessment Findings: A Curriculum Interpretation of the Major Findings of the Massachusetts Statewide Assessment Program
9. Resources for Training Educators of Children with Special Needs

Resources for Schools topics to look for in the future:

- . Student Rights and Responsibilities
- . Options in Environmental Education
- . Guidance and Counseling Programs
- . Related Educational Agencies

Community Education

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# INTRODUCTION

This resource guide provides a variety of information about the education of gifted and talented students. Who are gifted and talented students? The following definition developed by an advisory panel to the U.S. Office of Education and adopted by the Massachusetts Board of Education, suggests a comprehensive assessment of the potential, achievement, and ability of these students:

Gifted and talented children and youth are those identified by professionals and other qualified individuals as having outstanding abilities and who are capable of high performance. These are children and youth whose abilities, talents, and potential require qualitatively differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.

This definition provides a framework for current state leadership efforts in providing educational options for gifted and talented students in Massachusetts.

Section I of this booklet is a rationale for educating the gifted and talented on the state and federal levels. It demonstrates the diversity among gifted and talented students in terms of their strengths, interests, and aptitudes, all of which have implications for gifted and talented programs. Also included are definitions of terms frequently used in describing programs for gifted and talented students.

Section II presents summaries of case studies prepared by Paul Brubaker, a graduate intern who studied critical features in developing and implementing programs for gifted and talented students. Nine school systems in Massachusetts volunteered to participate in the study. These program descriptions will be helpful to other school districts making decisions about their own program options.

Section III describes many of the programs for gifted and talented students currently operating in Massachusetts schools. School systems that reported the existence of programs for the gifted and talented on their 1978 school summary report were invited to submit program descriptions to the Bureau of Student Services. These programs were not visited or evaluated in any way, and with minor editorial changes, the descriptions included here are exactly as reported to us by the school districts themselves.

Section IV includes a variety of resources for people interested in education for the gifted and talented. Several types of materials are provided:

- training programs, workshops, or degree programs in gifted and talented offered by colleges, universities, or collaboratives in Massachusetts and other states;
- national and state organizations that provide information or services to educators and parents;
- audiovisual materials on the education of the gifted and talented;

- an annotated bibliography.

This booklet is the first attempt to compile and share information about statewide activities, resources, and training programs. It is our belief that it will significantly increase the level of awareness, interest, and commitment to quality programs for gifted and talented students in Massachusetts.

In preparing this resource guide, the continued assistance and support of a number of people have been invaluable: Lori D. Moak and Janis DiStefano of the Bureau of Student Services; Mitzie Kocsis and Ruth Santer of the Massachusetts Dissemination Project.

April, 1979

# **SECTION I**

## **RATIONALE AND DEFINITIONS**



## RATIONALE

During the past decade educators have become increasingly aware of the importance of individualized approaches to teaching and learning. As educators have become more skillful in their use of these approaches, school systems have attempted to tailor their offerings, as much as possible, to the needs of individual students. Educators have found that significant learning occurs when the child is personally involved in a learning process focused on his or her particular needs, interests, and strengths. As a society we have come to agree that all children, regardless of their abilities, are entitled to individualized educational opportunities in order to develop to their fullest human potential.

Despite this agreement, attention to gifted and talented children in the public schools has been sporadic and frequently affected by competing social and educational priorities. Twenty years ago, the development of programs for gifted children was sparked by the scientific and military challenges of Sputnik. Then the crisis passed; the needs of other student populations were addressed and the gifted and talented were left, on the whole, to fend for themselves. Arguments were raised that gifted children didn't need special attention---that they could make it on their own. In point of fact, attention to their needs was often postponed because many did achieve, but without realizing their fullest potential.

Today, however, there is a resurgence of interest in the gifted and talented which seems to grow out of a renewed commitment to develop more appropriate educational opportunities for all children. The United States Office of Education is committed to the education of the gifted and talented as evidenced by the 1972 report to the Congress on the Education of the Gifted and Talented. That report documented that gifted and talented children were not being identified in the schools and that federal, state, and local governments were doing little to provide programs for them. The report reawakened national interest in the education of gifted and talented children.

As a further outcome of the 1972 report, the federal government created an Office of Gifted and Talented to provide the impetus for a national effort to develop the potential of gifted children. With this support, many states, including Massachusetts, took steps to recognize the needs of the gifted and talented.

In December of 1978, the Massachusetts Board of Education approved a position paper on the gifted and talented. This paper was the result of a year-long policy development process involving parents, teachers, administrators, members of cultural and business organizations, and the community at large. In this position paper, the Board addressed the specific challenge of meeting the needs of the gifted and talented as stated by Sydney Marland, former U.S. Commissioner of Education:

We give ardent lip service to individualizing instruction. We have come a small distance in reaching out to the uncommon child who is handicapped. It is no less a valid public policy, consistent with individualization, to reach out now to the uncommon child who is able.

The Board of Education acknowledges the role of schools in addressing the educational needs of gifted and talented students and supports the development of programs for these students in local school systems. The Board further acknowledges that characteristics which communities recognize as indicators of giftedness and talent will be as diverse as the communities and students themselves. Gifted and talented children are as different among themselves as are other children. A gifted student who is serious and deeply involved in study and research will differ dramatically from an athletic student who is a gifted leader and has a broad range of interests. A child who is an extremely talented artist or a deeply introspective poet will differ from both of these individuals. Gifted and talented individuals are found in all walks of life, and from all social and economic groups.

The federal Office of the Gifted and Talented and the Massachusetts Board of Education encourage school districts to use a wide range of identification and assessment techniques. Important emphasis has been placed on the development of assessment techniques appropriate for culturally different and economically disadvantaged populations. The Board asks local school districts to identify all gifted and talented students regardless of sex, linguistic, cultural, ethnic, or socio-economic backgrounds. Effective programs for identification and screening use varied and innovative techniques which include nomination by peers, evaluation of pupil products, tests of creativity, and behavioral checklists in addition to more traditional measures such as standardized achievement test scores.

Finally, the Board of Education encourages local school districts to use community resources in meeting the needs of gifted and talented students. Resource persons, or mentors, can be identified to work with individuals or small groups by sharing special skills, knowledge, or interests. Mentors may be found among groups including senior citizens, business people, college instructors, members of civic organizations, and high school students themselves. Providing gifted and talented students with people, facilities, and learning experiences beyond the school opens up a rich array of resources and strengthens community support.



## DEFINITIONS

### Abbreviated Guide to Terms Used in Describing Programs for Gifted and Talented Students

1. acceleration      Programs which provide for rapid progress through sequentially structured content. Examples of acceleration are: 1) early entrance, 2) skipping grades, 3) credit by examination, 4) non-graded classes, 5) early graduation, and 6) advanced placement classes.
2. enrichment      Learning experiences which are intended to extend, supplement, and/or deepen understandings within specific content areas.
3. differentiated programming      Programs that are qualitatively different from that provided in the regular classroom.
4. heterogeneous grouping      Gifted and talented children remain in the regular classroom for instruction with their chronological peers.
5. homogeneous grouping      Gifted and talented children are grouped together in a separate classroom for accelerated learning or enrichment experiences.
6. itinerant teacher      A teacher who travels between two or more schools to work with children. Transportation of materials and equipment may be involved.
7. mentor      A qualified adult who works with a student in a particular area of interest. A mentor may provide an internship or an apprenticeship.
8. pull-out program      Children are taken out of classrooms for a specified period in order to work together on special assignments or activities which are not part of the regular program.
9. resource room      A separate room or area containing a variety of learning materials and staffed by a resource room teacher. Children visit the resource room for special work assignments or group experiences.
10. semi-separated      Children are homogeneously grouped for some part of the school day.
11. total separation      Children are homogeneously grouped for the entire school day.

# **SECTION II**

## **PROFILES OF NINE CASE STUDIES**



During the 1977-1978 school year Paul Brubaker, graduate student at Harvard University, served an internship with the Bureau of Student Services, Massachusetts Department of Education. Brubaker did a comprehensive review of the literature on the characteristics seen as most important in developing programs for gifted and talented students. He then designed a study to identify variables most critical in building such programs from the points of view of both teachers and administrators. The study was limited to nine programs selected from among those first reported to the Department of Education in the 1977 School Summary Report. The sample was chosen to insure representation from all parts of the state and to reflect a range of funding sources.

#### Summary of Findings

Brubaker identified eighteen key features in the development and implementation of programs for gifted and talented. He then asked teachers in the programs to rank order these features and compared their rankings with those of administrators. He found that teachers and principals strongly agreed that a statement of philosophy and objectives was the most important feature in a program. In addition, three other features were seen as having top priority to both teachers and administrators: student selection procedures, community support, and a curriculum that was purposefully distinctive.

There were differences between the groups as well. For example, teachers were concerned about the need for clear administrative responsibility for the program while principals focused on the need for overall planning.

Least important features to both teachers and administrators were the availability of supplementary expenditures, and the need for special equipment and facilities.

In addition, Brubaker visited the nine programs and wrote an in-depth description of each. A summary of each case study is reported in this section.

## AGAWAM

Project SEE, (Specific Enrichment Education).  
Clifford M. Granger Elementary School

Program Prototype: part-time enrichment (one hour per day)  
Participants: thirteen fourth and fifth grade students  
Funding Source: local, \$2,000

Contact: Ann Bradford, Program Director, (413) 789-1400

### GOALS

Project SEE is for fourth and fifth grade students of high intellectual ability. It is designed to be a program of enrichment, although acceleration has often been a by-product. The goals of the program are:

- to help the gifted child develop into an intellectually and creatively capable, productive, and compassionate human being; and
- to expose the gifted child to wider and farther intellectual horizons which can be pursued throughout his or her learning career.

### STUDENT IDENTIFICATION

Before Project SEE began, program personnel met with parents of the prospective participants to let them know what was being proposed for SEE. In the first phase of selection the principal reviewed the records of all third and fourth grade students who scored in the eighth and ninth stanines on achievement tests. Recommendations for these twenty-one students were sought from past and present teachers in order to judge the student's ability to progress simultaneously in both the regular and enrichment programs. Twelve students were selected.

### CURRICULUM

Renzulli's Enrichment Triad Model\* has been adapted to Project SEE. General exploratory activities expose students to a wide variety of topics, issues, and authors not ordinarily covered in the regular classroom. Group activities in critical thinking and creativity provide students with the skills and abilities necessary to solve problems in a variety of areas. Small group investigations of real problems have included videotaping documentaries on the life of Nathan Hale and The Upstairs Room, a book dealing with the hiding of Jewish children during World War II.

All Project SEE students are placed together in an open resource room where other students and teachers can see the activities, helping to bridge the gap between the program and regular classes.

### CONSIDERATIONS FOR ADAPTATION

The principal has been active in finding the additional resources required for general supplies, transportation, and the program director's aide; and in evaluating the program. Once a week the teacher and principal review past activities

\*see Bibliography pg.62.

and preview future needs. In this way, the administration, parents, and community can be kept informed about the progress of the project.

Believing it is essential to involve as many staff members as possible in student selection and program evaluation, Project personnel encourage other districts to examine their communications network before beginning such a program.



## BROCKTON

### A-II (Advanced II) Program, West Junior High School

Program Prototype: full-time, homogeneous grouping  
Participants: seventy seventh and eighth grade students  
Funding Source: local, minimal costs

Contact: Joseph F. Plouffe, Assistant Superintendent  
(617) 580-7531

### GOALS

The academically talented junior high school student is the focus of attention in the Brockton A-II Program. Students are grouped homogeneously for all their academic coursework.

### STUDENT IDENTIFICATION

Most of the junior high students are identified in third grade in preparation for the elementary school Program for Gifted Children (PGC). Initial referral by grade three teachers and school principals is based on: 1) teacher's observations and recommendations regarding health, emotional stability, interests, reasoning ability, originality, and capacity for work; 2) report cards and cumulative records; 3) intelligence ratios of 120 or better as shown by group tests; and 4) results of any previous individual intelligence test. Final screening is performed by the assistant superintendent, the principal of the school housing the program, and a committee of teachers from the PGC. Interviews are then conducted with parents of the forty selected children to familiarize them with the purpose of the program and to obtain their consent for pupil placement. Most of the students who reach PGC grade six continue at the junior high school level. Additional students are identified by a referral process on a continual basis.

### CURRICULUM

The curriculum is organized to offer the students a wide range of learning activities concentrating on the higher cognitive levels of analysis and synthesis. In addition to basic skills taught in grades seven and eight throughout the city, the process-oriented A-II curriculum includes the humanities, sociology, philosophy, psychology, anthropology, and foreign languages. There is some acceleration but basically the program expands the learner's scope, providing for the divergent as well as the convergent thinker.

The Advanced-II Program functions on a flexible schedule allowing for large and small groups, independent study, and periodic self-structured days when students determine their own learning activities. A team of four teachers is responsible for organizing the daily schedule and implementing the philosophy of the program. Cooperative planning, team teaching, and close cooperation among the guidance counselor, administrators, parents, and teachers help the program to function effectively.



## BROOKLINE

Program Prototype: heterogeneous grouping and teacher in-service  
Participants: selected students, kindergarten through grade eight  
Funding Source: local

Contact: Anne Nash, Program Director (1978-79), (617) 734-1111 x130  
Louise Thompson, Program Director (1979-80), (617) 734-1111 x119

### GOALS

The goals of this integrated approach to gifted education are:

- to develop some techniques and programs suitable for the average as well as the academically able child,
- to develop techniques for teachers and parents to encourage all children to reach their highest potential; and
- to develop a sound program consistent in all grades and schools.

### STUDENT IDENTIFICATION

Brookline's priority is a professional development program including a paid summer workshop and two in-service days during the year for teachers from all elementary schools. These workshops develop an understanding of students' learning styles which is incorporated into the process for identifying students and is purposely informal.

An identification process, which includes teacher check lists, group IQ, and achievement scores, was instituted in 1978-79 to pinpoint students of high intelligence, academic ability, and creative or productive thinking. Most are served in the classroom through materials that challenge able students. A smaller number of students are selected for special activities designed to meet their particular gifts and needs. Two half-time staff positions are being sought to facilitate these special activities in 1979-80.

### CURRICULUM

The curriculum provides diverse experiences for individual abilities and needs to "extend" children's thinking and learning opportunities. This approach impacts on everybody, but does not reach all the gifted and talented constantly. However, this format does provide opportunities for students to excel in directions of individual interest and ability, while minimizing the problems of separation.

### PROGRAM ORGANIZATION AND OPERATION

The in-service component for teachers and challenging curriculum materials are the key components in this integrated approach. An Advisory Committee of parents and school staff evaluate the effectiveness of individualizing instruction for gifted and talented students.

Coordination of the program which is entitled: A Systematic Process for the Identification and Education of Gifted and Talented Students will be handled through the office of the Assistant Superintendent for Curriculum and Instruction in 1979-80.

## CHELMSFORD

### Leadership and the Law, Chelmsford High School

Program Prototype: high school course-two 45-minute periods per week

Participants: fourteen juniors and seniors

Funding Source: U.S. Office of Gifted and Talented, \$6,762

Contact: Marcia Greenman Lebeau, Program Director, (617) 251-8792

### GOALS

The general purpose of this course is to provide potential leaders with an opportunity to interact as a peer group in the study of morally complex social and legal problems. The Program Director is engaged in the study of leadership ability. Ms. Lebeau is attempting to determine (1) if student leaders possess a heightened sense of justice and ethical awareness, and (2) if these traits can be encouraged through the study of the law.

### STUDENT IDENTIFICATION

Approximately fifty self-selected academically gifted or high-achieving students were involved in the first semester comprehensive law classes. It was anticipated that twelve to fifteen students would be identified as having potential or actual leadership ability.

A multiple-criteria identification process was employed to select highly motivated, verbally fluent leaders. Questionnaires were sent to parents requesting developmental and personal information.

Students whose combined verbal and numerical ability scores were above the sixth stanine on the Differential Aptitude Test were selected in the first screening process. Further screening identified students whose SRA scores in reading, language, and resource skills were above the 90th percentile. Finally, peer nominations were obtained using a sociogram technique dealing with the mock selection of town officials.

### CURRICULUM

The course includes a review of society's standards of ethics and morality, the students' own standards, the moral issues of current events, exercises in logic, and an analysis of major Supreme Court decisions as affected by the ethics of an era. The class is conducted as a seminar using the Socratic or case method.

To enhance the higher mental processes of analysis, synthesis, and evaluation, students follow a legal case of their choice and suggest ways the law could be interpreted differently to produce an equitable and just decision. Mentors in the field of law have helped to shape this program and have provided direction to individual students.



## MEDFIELD

### Project IMPACT (In Medfield Program for Academically and Creatively Talented)

Program Prototype: partial pull-out (two half day sessions per week)

Participants: twenty-nine fifth and sixth graders, thirteen seventh and eighth graders

Funding Source: CETA (Comprehensive Employment Training Act),  
\$114,000 for 1977-78, funded by Medfield 1978-79

Contact: Diana Otis Reeves, Program Director, (617) 359-2396

### GOALS

IMPACT, an enrichment program for the academically and creatively talented, is designed to:

- offer gifted students the opportunity to be with peers of similar capabilities;
- enable students to become independent learners, using higher mental processes and creative expression;
- provide enrichment not only for those in the program but for other students who will benefit from IMPACT research, projects, and materials;
- tie in with community activities to allow for real life integration; and
- allow twenty-two paraprofessionals to receive training as teachers and classroom aides.

### STUDENT IDENTIFICATION

IMPACT's identification system includes: 1) nominations from teachers, parents, peers, and self; 2) achievement tests and Raven's Progressive Matrices; and 3) Scales for the Rating of Behavioral Characteristics of Superior Students, (Renzulli, Hartman, et al.) and the Me Booklet, developed by Medfield staff.

### CURRICULUM

The IMPACT curriculum was based on The Enrichment Triad Model by Dr. Joseph Renzulli.\* Students and parents completed interest inventories to determine content areas for three ten-week units. The first five weeks of each unit were spent on general exploratory skills and group training, the second five weeks involved students in in-depth investigations of real problems.

### CONSIDERATIONS FOR ADAPTATION

The one-year, CETA-funded IMPACT model was successful enough to warrant local funding of a modified version of the program for 1978-79. Community support for, and involvement in, the program along with positive student change were key reasons for the continuation.

CETA funding placed several constraints on the program in recruiting competent paraprofessionals, and acquiring materials immediately. Another reality of the

\*see Bibliography pg. 62.

program is the pressure of peers and time on participants. Avoiding the "egg-head" label is a concern to some students. Also, because IMPACT work was done in addition to regular classwork, students often restrict their IMPACT involvement.

Consensus in Medfield surrounds the notion of tying gifted and talented activities into established projects in the community. Mentor and community contacts are used to further differentiate curricula. Establishing and maintaining these contacts has proven successful.



## NEW BEDFORD

### TAG (Talented and Gifted) Magnet Resource Program

Program Prototype: pull-out (bussed to magnet school, bilingual)

Participants: fourth, fifth, and sixth graders

Funding Source: Bureau of Equal Educational Opportunity

Massachusetts Department of Education, \$52,760, since 1976

Contact: Ligia de Medeiros, Program Director, (617) 997-4511

### GOALS

The Talented and Gifted Magnet Resource Program (TAG) in New Bedford is an alternative for academically talented students. Fifty percent of the TAG enrollment is from the minority population. Over two-thirds of these students are Portuguese. There have been first-year immigrants participating who did not speak English. For them, experiences were designed to help them utilize higher thought processes while they mastered language skills.

### STUDENT IDENTIFICATION

The TAG screening committee employs several criteria for identifying potential enrollees.

1. All principals submit a list of third grade students who score 125 and above on group intelligence tests and are above the 94th percentile on both the Standard Achievement Test and the Metropolitan Achievement Test.
2. The candidate's classroom teacher fills out sections of Scales for Rating the Behavioral Characteristics of Superior Students (Renzulli, Hartman, et al.) for each student.
3. The screening committee is composed of a principal, a TAG teacher, the TAG supervisor, two teachers from a parallel enrichment program, a member from the minority community, and one bilingual representative. The committee makes the final selection of candidates.

Students not meeting these criteria may still be considered for the program. Teachers may nominate students. The committee is sensitive to students enrolled in Title I schools, bilingual students, and members of minority groups for whom teacher recommendations are most important. To compensate for a lack of suitable testing, every minority child is given an individual WISC (Wechsler Intelligence Scale for Children) if giftedness is suggested by other categories. For bilingual students, an instrument sensitive to the abilities of Portuguese-speaking students has been developed. The preferred criteria for selection is "demonstrated creativity" and "high motivation". The long-range plan is to revitalize current identification procedures by conducting in-depth interviews.

### CURRICULUM

The curriculum is process-oriented, and includes skills in research, thinking, creativity, communication, automated computing, and speed reading.

### CONSIDERATIONS FOR ADAPTATION

The TAG staff contends that for a project of this dimension and intensity, a supplementary budget and weekly planning day are essential.

## OXFORD

### Oxford Project Talent (OPT)

Program Prototype: pull-out (2 half-day sessions per week) itinerant teacher  
Participants: fourth, fifth, sixth, and seventh grade students in four schools  
Funding Source: local, teacher salary only, since 1976  
Contact: Anthony DeCesare, Program Director, (617) 987-2835

### GOALS

Oxford Project Talent (OPT) is for academically talented students in grades 4-7. Enrichment activities provide a format where gifted students can come together to challenge and interact with others having similar skills and talents.

Some of the goals are to:

- provide students with a balance between prescription and freedom in investigative study, the opportunity to assess a variety of ideas and examine his or her own thinking, and the thinking of others;
- encourage self direction, exploration of specific subjects in an inter-disciplinary manner, originality of thought and expression, and examination of elements which affect personal conduct and social action;
- develop a stronger self-image, the recognition of the need for quality in investigation, and the skills of interpreting uncovered data.

### STUDENT IDENTIFICATION

The Pupil Appraisal Team (PAT) chooses the candidates for the program. PAT members are the program teacher, the principal, guidance counselor, and classroom teacher for the respective school. Any teacher or administrator may refer a student to the PAT for consideration. Pupil recommendations also receive consideration, as do recommendations from parents and other school professionals. All recommendations are based on:

- I Q score of 130 or higher based upon the Otis-Lennon Mental Abilities or other group test;
- ninety-five percentile in the reading section of the Iowa Achievement Test; and
- ninety-five percentile in the mathematics sections of the Iowa Test.

Secondary review is given to those students who meet at least one of the criteria and who exhibit other qualities indicated through teacher recommendations. The Scale for Rating Behavioral Characteristics of Superior Students (Renzulli, Hartman, et al.) has been adapted for local purposes.

### CURRICULUM

The curriculum is adapted from Renzulli's Enrichment Triad Model. Research projects are completely separate from regular classes with contracts as short as three weeks or as long as several months. Longer term contracts are broken down into specific facets through teacher-student conferences and agreements.

Students are expected to continually evaluate themselves and their peers to guarantee on-going progress. Every attempt is made to individualize the program and students often work with volunteer faculty members at the high school or with outside mentors approved by the administration. Community resource people, high school students, and parents have all been greatly involved in the program.



## PROJECT PRISM

(Easton, Foxborough, Mansfield, Norton)

Program Prototype: mainstreamed, teacher-support  
Participants: Middle and Junior High Schools in  
Easton, Foxborough, Mansfield and Norton  
Funding Source: ESEA, Title IV-C, 1977-1980 \$194,739.

Contact: Maryellen Cunnion, Program Director, (617) 285-3718

### GOALS

PRISM (Potential Realized through Innovative Support Models) is an integrated project which permits gifted and talented students to be identified in the sixth grade, but remain in the mainstream of education. Regular teachers are responsible for differentiating educational experiences for these students. PRISM staff acting as consultants to teachers, specialists, and administrators, provide workshops, resource materials, and ongoing assistance with independent study programs, mentors, curriculum adaptation, and mini-courses.

### STUDENT IDENTIFICATION

A three-step identification procedure developed by sixth grade teachers includes initial screening, further assessment of identified candidates, and final selection. In the initial screening, nominations are gathered from teachers, parents, and peers, and added to existing test information. Step two further assesses the pool of candidates for aptitude and achievement (for academically gifted) or by reviewing creative products (for artistically and musically gifted children). Case study sheets detailing the characteristics, accomplishments, and needs of the pupils in the pool of candidates are reviewed by project staff. After discussions between project staff and teachers, final selections are made.

### PROGRAM ORGANIZATION AND OPERATION

Two full days of in-service training were provided for sixth and seventh grade teachers in the first year of the project; during the second year, eighth grade teachers will receive in-service training. A teacher's involvement with PRISM staff beyond the in-service training is voluntary. As expected, some teachers are more eager to differentiate curriculum for their gifted students than others. Teachers who request assistance are supported by project staff, resources, and frequently parents.

### CONSIDERATIONS FOR ADAPTATION

Support of principals for the teachers and program is critical in federally funded projects. Local commitment to the program must be developed if it is to survive beyond the funding period. In planning any type of gifted and talented program, a year should be spent assessing the unique needs of the school system and considering a variety of options. Be sure that the school's regular curriculum is sufficiently enriched so that the program for gifted students will be sufficiently challenging.

Starting a pilot version slowly with students who clearly need differentiated learning experiences will help a long-term program succeed. Most importantly, there is more than one way to provide for the gifted. Matching services to a student's learning style is a key to an educationally sound gifted and talented program.



## QUINCY

### Elementary Laboratory Center (ELC), Lincoln-Hancock Community School

Program Prototype: pull-out (one day per week)  
Participants: 160 fifth and sixth grade students  
Funding Source: local (\$3000 and 3 teachers' salaries)

Contact: Morrie Hibbard, Principal  
(617) 786-8715

## GOALS

The Elementary Laboratory Center (ELC) for gifted students originated in 1958 and has continued as part of the Quincy Public Schools ever since. The purpose of the ELC is to provide an environment that enriches other classroom and life experiences for academically talented students.

## STUDENT IDENTIFICATION

Fourth grade students with a total battery score of 120 or above on the Short Form Test of Academic Aptitude (SFTAA) and who have achieved at the 95th percentile or above on the California Achievement Test (CAT) total battery must be recommended for fifth grade entrance into the program. Students who have achieved one of these figures and who have a sum of at least 215 when both are added may be recommended at the discretion of the home school. The Scale for Rating Behavioral Characteristics of Superior Students (Renzulli, Hartman, et al. and a simple teacher recommendation form supplement the standardized tests. Program personnel would like to expand the criteria used to identify the under-achieving gifted and students with strengths other than academic achievement.

## CURRICULUM

Quincy uses the locally created Student Centered Learning System (SCLS) curriculum objectives and used the Enrichment Triad Model\* (Renzulli) to enliven Center learning. The activities are varied and stress the development of the higher level thinking skills (analysis, synthesis, evaluation). Some of the activities used to develop these skills are creative writing, interpretive reading of Junior Great Books and science fiction, seminars conducted by community resources, and a monthly speaker's night for students and parents. Immersion weeks are the peak experiences for many students in which the student is out of school for an entire week studying government or history in depth.

## CONSIDERATIONS FOR ADAPTATION

ELC has evolved over a long period of time and from a broad base of community support. Any hasty attempt to imitate such a large-scale program would probably fall short of expectations. The recommended strategy for beginning a program is to start small and have sufficient resources before increasing the number of students to be served.

\*See Bibliography pg. 62.

# SECTION III

## SURVEY OF PROGRAMS IN MASSACHUSETTS

Information about gifted and talented programs was initially taken from the October 1, 1978 School Summary Reports to the Massachusetts Department of Education. Out of 383 operating school systems, 223 systems reported some kind of program for gifted and talented students.

On January 10, 1979, a letter was sent to the school districts that had reported programs, asking for more information. One hundred districts responded, and their programs are briefly described in this section.

Several important points should be made about this process. First, no explicit criteria were provided as to what qualified as a program for the gifted and talented. The intent was to encourage school districts to make these judgements independently. As a result, the programs run the gamut of possibilities from a Junior Great Books program, to accelerated elementary mathematics, to a six-week resident summer enrichment program for eighth and ninth graders. Obviously not all programs will meet a particular school system's criteria for educating gifted and talented students.

Secondly, with minor editing, program descriptions appear just as they were reported. Inclusion does not imply endorsement by the Department of Education. These programs are presented to indicate the variety of options and approaches to the education of the gifted and talented found in school districts in the Commonwealth.

Finally, readers can assume that unless otherwise noted, these programs are funded using local sources, and can be visited if prior arrangements are made with the individual school.



## ANDOVER

Doherty School  
36 Bartlet Street  
Andover, MA 01810  
Contact: Lois Haslam  
(617) 470-1700  
x228

Using school facilities and community and greater Boston museum resources, Andover's gifted programs develop competencies that complement, yet move beyond, regular classroom curricula. Activities match the particular learning characteristics of students grades 4-6. Areas of concentration include independent study, problem solving, planning, and critical and creative thinking skills.

## ASHLAND

Mindess Middle School  
90 Concord Street  
Ashland, MA 01721  
Contact: Gerald Linder  
(617) 881-2126

Mindess Middle School reports that the algebra class, geared for 15 to 18 accelerated 8th grade students, has been an integral part of the math program. Teachers recommend students based on ability and achievement.

## ATHOL-ROYALSTON

Athol High School  
2363 Main Street  
Athol, MA 01331  
Contact: Ms. Dufort  
(617) 249-3254

Gifted students at Athol High School receive enrichment through independent studies in various disciplines. Department heads approve the selected studies and faculty members provide guidance.

## BEDFORD

Mudge Way School  
Bedford, MA 01730  
Contact: Anne Drummond  
(617) 275-2155

Mudge Way School has established a program for 53 students, grades 2 through 6. The program covers all subject areas and utilizes individualized learning contracts with a mentorship approach. The program is funded locally with some contribution from the Merrimack Education Center's Project Enterprise.\*

## BERKLEY

Berkley Elementary School and  
Berkley Junior High School  
South Main Street  
Berkley, MA 02780  
Contact: Mr. Canuel  
(617) 822-9550

Gifted students, grades 3-8, participate in Berkley's Hi-Performance program. Individualized programs have been developed for 29 students with more participants expected in the future. The process involves: student referral; a teacher/parent/principal conference; student interview; and program development, implementation and evaluation.

## BEVERLY

McKay School  
131 McKay Street  
Beverly, MA 01915  
Contact: Judith Alexander  
James Watras  
(617) 922-2867

The Elementary Enrichment Center (EEC) is a one day per week pull-out enrichment program for academically talented 4th, 5th, and 6th grade students. Beginning in September 1979 the program will be extended and modified for both of the two junior high schools.

\* See also pg. 49.

## BILLERICA

S. G. Hajjar Elementary School  
Rogers Street  
Billerica, MA 01862  
Contact: Louise Ladd  
(617) 667-3871

The Enrichment Activities Program serves 75 students in grades 3, 4, and 5. Six volunteer teachers assist the full-time teacher in French, metrics, weather and climate, theatre and library skills. To be included in the program, students must be two grade levels above in achievement, and maintain above grade level marks.

## BLACKSTONE VALLEY VOCATIONAL REGIONAL SCHOOL DISTRICT

Blackstone Valley Regional  
Vocational Technical High School  
Pleasant Street  
Upton, MA 01568  
Contact: John F. LeBrun  
(617) 529-7758

This program currently serves 3 independent study students in advanced mathematics, calculus, and linear algebra, to prepare them for college mathematics

## BOLTON

Emerson School  
Bolton, MA 01740  
Contact: Linda Kellom  
(617) 779-2821

The Literary Shells Program is a reading/language arts course offered for superior readers in the elementary grades to supplement the basic reading and literature taught in the classroom. Discussion, problem solving techniques, and higher level thinking skills are emphasized in afternoon mini-courses.

## BOSTON

26 Court Street  
Boston, MA 02108  
Contact: Eric Cooper  
(617) 726-6595

A number of Boston's elementary schools participate in the Advanced Work Class (AWC) program. AWC at the 4th and 5th grade level is a 2 year program for students with similar abilities who are grouped with the same teacher and taught regular grade level curriculum with a wider understanding of curriculum areas, rather than acceleration. The Academically Talented Section (ATS) is a continuation of AWC in grade 6. Visitation policies vary with each school.

## BOSTON

Boston Technical High School  
205 Townsend Street  
Dorchester, MA 02121  
Contact: Sam Feldman  
(617) 445-5350

Boston Technical High School offers a curriculum for gifted and talented students in mathematics, science, and technology. Students gain entrance to the program through examination.

## BOSTON

Boston Latin Academy  
380 Talbot Avenue  
Boston, MA 02124  
Contact: Louise Dooiley  
(617) 825-4240

Boston Latin Academy offers boys and girls a classical college preparatory program. The entrance examination for grades 7 and 9 is open to any student residing in the city of Boston.



## BOURNE

Curriculum Office  
5500 Curtis Boulevard  
Bourne, MA 02542  
Contact: Eleanor M. Priestley  
(617) 563-3736

Bourne's study committee on the academically and/or creatively talented is recommending the initiation of an enrichment program in grades 4, 5, and 6 to the school committee. Planning will begin in 1979-80 for implementation in the 1980-81 school year.

## BRAINTREE

Hollis School  
482 Washington Street  
Braintree, MA 02184  
Contact: George Cahill  
(617) 848-4000 x180

The Hollis School offers an enrichment program for 4th and 5th grade students in mathematics and language arts. The program serves 80 students who meet with a team of resource teachers in a center at Hollis School one day per week. The team is composed of a mathematics specialist, 2 reading specialists, 2 media specialists, and 2 guidance specialists.

## BROCKTON

Arnone School  
175 Warren Avenue  
Brockton, MA 02401  
Contact: Francis J. Dunbar, Jr.  
(617) 580-7241

Approximately 40 students are selected for Brockton's gifted classes. Specialists in music, art, physical education, and foreign languages work with these 4th grade level classes once a week. The program encourages both independent and group activities. See also the Advanced II Program on pg.11.

## CAMBRIDGE

Peabody and Rindge Schools  
Cambridge, MA 02138  
Contact: Marilyn A. McGinn  
(617) 492-8000 x277

The Academically Talented (A.T.) Program, operating primarily in self-contained classrooms in grades 6, 7, and 8, serves 200 students. Involvement with the Museum of Science and Little People's Theatre supplement acceleration and enrichment activities.

## CANTON

Hemenway School  
670 Washington Street  
Canton, MA 02021  
Contact: James Lynch  
(617) 828-1012

This multi-dimensional program serves intellectually gifted 3rd, 4th, and 5th graders and utilizes SOI\* factor analysis as a basis for individualizing educational plans.

## CONCARD

Thoreau School  
29 Prairie Street  
Concord, MA 01742  
Contact: John A. Benjamin  
(617) 369-9500 x219

The Thoreau School houses a pilot program for 21 gifted and talented 5th graders. Materials and new techniques are being developed for use in this program. To assure a free and open atmosphere, visitors have not been allowed.

\*See Bibliography - Guilford pg. 57.

## DARTMOUTH

Dartmouth Middle School  
529 Hawthorn Street  
North Dartmouth, MA 02748  
Contact: Douglas Pfeninger  
(617) 997-3178

The Enhanced Learning Program is an enrichment program for 30 academically talented and gifted 8th grade students. In addition to enhancing language arts and mathematics skills, time spent in the resource room develops research, thinking, creativity, communication, and listening skills.

## DEDHAM

Avery School  
123 High Street  
Dedham, MA 02026  
Contact: Regina Tierney  
(617) 326-5354

The Gifted/Talented Program in Dedham begins September, 1979 for grades 5 and 6 on a one-day-a-week basis. Plans are still incomplete but the school will be pleased to send any information after September, 1979.

## DENNIS-YARMOUTH

Mattacheese Middle School  
West Yarmouth, MA 02673  
Contact: D. F. Eldredge  
(617) 771-0232

The Mattacheese School conducts an environmental studies enrichment program for gifted 6th, 7th, and 8th grade students. Fifteen students visit the Cape Cod Museum of Natural History one afternoon per week after school for eight weeks.

## DENNIS-YARMOUTH

Ezra H. Baker School  
P.O. Box 85  
Dennis Port, MA 02639  
Contact: Walter S. Morley  
(617) 398-2229

The Ezra H. Baker School has an individualized mathematics program for a 4th grader working on a self-study course in algebra I using the same text as the high school. Later in the year the school plans to introduce the student to computer programming.

## DENNIS-YARMOUTH

Marguerite E. Small School  
440 Higgins Crowell Street  
West Yarmouth, MA 02673  
Contact: Charles T. Orloff  
(617) 775-5233

The Talented Gifted Art Program meets for one hour a week for children in grades 4 and 5 selected for their creative ability. Most have shown high development in fine motor skills, inventiveness, flexibility and originality.

## DENNIS-YARMOUTH

Nathaniel H. Wixon Middle School  
P.O. Box R  
South Dennis, MA 02660  
Contact: John Todd (Stage Band)  
Nancy Keefe (Romance  
Language Course)  
(617) 385-9119

About 14 regular concert band members displaying superior capabilities in reading popular music comprise the Stage Band. Another 30 6th grade students, proficient in reading, are enrolled in a romance language course. This course traces the development of languages by studying the influence of Latin on the Romance languages and English.



## DENNIS-YARMOUTH

John Simpkins School  
Old Main Street  
South Yarmouth, MA 02664  
Contact: George A. Cross  
(617) 394-3545

Junior Great Books, an enrichment discussion group for 4th and 5th grade students, focuses on reading and explores texts written by selected authors. Fifteen students and one teacher, meet once per week for 45 minutes. Multi-Media Art, an art exploration and creativity class, gives 20 5th grade students the experience of self-expression through a variety of art media and outside community contact. Students in both programs are nominated by parents and teachers using Renzulli's \* behavioral scale.

## EVERETT

Centre School, grades 4-6  
Parlin Jr. High School, grades 7-8  
Everett High School, grades 9-12  
548 Broadway, Everett, MA 02149  
Contact: Virginia J. DeNatalie  
(617) 389-7950 x120

Everett implements an academically talented program on the elementary, junior, and senior high levels with enrichment and acceleration provided in areas of students' strengths and interests. Ongoing evaluations determine eligibility for continuation in the program.

## FALL RIVER

417 Rock Street  
Fall River, MA 02720  
Contact: Mary T. Carvalho  
(617) 678-4571

Five hundred 6th, 7th, and 8th grade students in homogeneous classes, participate in the Special Abilities Program in Fall River. Sixth graders begin studying French three times a week, and continue on a full-time basis in 7th and 8th grade.

## FALMOUTH

Teaticket Elementary School  
45 Maravista Ext.  
Teaticket, MA 02536  
Contact: John D. Oser  
(617) 548-1550

The High Intensity Learning Center (HILC) offers 3rd and 4th graders of all ability levels opportunities in enrichment reading and prescribes individual learning packages based on students' needs. Center staff diagnose, prescribe, monitor, and assess progress as pupils work toward learning objectives.

## FITCHBURG

Reingold Elementary School  
70 Reingold Avenue  
Fitchburg, MA 01420  
Contact: Paul Benoit  
(617) 345-6991

The Academically Talented program includes 40 5th and 6th graders who have been identified by achievement, teacher recommendations, and individual IQ tests. Team teachers build interdisciplinary units around local resources and field experiences.

## FRAMINGHAM

Secondary Schools  
Framingham, MA 01701  
Contact: Arthur DelPrete  
(617) 877-3338

Both North and South High Schools offer advanced placement courses in calculus, biology, chemistry, physics, and English for accelerated students. Four middle schools offer algebra to 8th grade students who are accelerated in mathematics.

## FRANKLIN

East Central Street  
Franklin, MA 02038  
Contact: Gus Sayer  
(617) 528-5600

Dimensions, an enrichment program for grades 4-6, brings 57 students into the resource room one full day each week. The curriculum provides students with many opportunities to pursue independent projects.

## FREETOWN-LAKEVILLE

Freetown Elementary School  
43 Bullock Road  
East Freetown, MA 02717  
Contact: August Pereira, Jr.  
(617) 763-5121

Thirty-nine 3rd and 4th grade children, who excel in many subject areas, especially reading, meet with the librarian once a week to work on book reports, independent research, a school newspaper, and other projects.

## FRONTIER REGIONAL SCHOOL DISTRICT

Frontier Regional School  
311 Main Street  
South Deerfield, MA 01373  
Contact: Gordon L. Noseworthy  
(413) 665-2118

Frontier Regional School conducts a pilot program for gifted 7th graders. Students meet with mentors three times per week on individualized enrichment projects.

## GRANVILLE

Village School  
Granville, MA 01034  
Contact: Mr. Bergeron  
(413) 357-6626

The Granville Village School offers French I for all students in grades 4-8 and algebra I to some students in grades 8. Both courses allow students to continue with second year French or mathematics when they reach high school.

## HADLEY

Russell School  
Middle Street  
Hadley, MA 01035  
Contact: Betty Hukowicz  
(413) 586-5446

The Russell School offers two programs. One is an in-school program for 10 4th graders stressing study skills and independent research based on a child's interests. An after school enrichment program involves 25 students, grades 5, 6, and 7, in blocks of enrichment activities after which they pursue independent research under the guidance of an advisor.

## HAMPSHIRE REGIONAL

Hampshire Regional High School  
RR #1, Easthampton, MA 01027  
Contact: Fred Rugg  
(413) 586-3960

Hampshire Regional High School reports an accelerated course in drama and acting. High school juniors work with dramatic forms from farce to tragedy through the study of one-act plays, modern full-length plays, and a Shakespearean play. In addition, students work with set design, make-up and costuming. Plays are studied from an academic point of view.

## HANOVER

Hanover High School  
Cedar Street  
Hanover, MA 02339  
Contact: Pamela Gray  
(617) 878-5450

Hanover High students explore individual interests through faculty guided projects. A staff committee approves proposals and, with the administration, evaluates research. Projects have included research in cellular biology, oral interpretation of literature, original poetry, and art work.



## HANOVER

Cedar Elementary School  
Cedar Street  
Hanover, MA 02339  
Contact: Ruth Douillette  
(617) 878-7228

The Cedar School has an enrichment program for high potential students in grades 1-5. Each student develops a general curriculum topic through independent study projects, field trips, and other activities. The teacher also assists and coordinates activities with regular classroom teachers.

## HUDSON

J.F. Kennedy School  
Manning Street  
Hudson, MA 01749  
Contact: David Quinn  
(617) 562-7313

Project R.E.A.C.H. is presently operating as a pilot program for 7th and 8th grade students who have been identified as academically gifted. The students have the option of attending classes in humanities, science, research and reference skills, reasoning skills, and debating. A project proposal is being written for federal funding.

## HULL

all elementary schools  
7 Spring Street  
Hull, MA 02045  
Contact: Richard P. Charlton  
(617) 925-0771

In Hull, program consideration for academically talented and gifted students is tailored to individual needs. Students are placed at more advanced grade levels in their particular areas of talent.

## UNION 31-TRITOWN DIVISION

Kingston, Halifax, and Plympton  
130 Pembroke Street  
Kingston, MA 02364  
Contact: Christopher J. Gregory  
(617) 585-4313

Project CHILD-79, a CETA funded project, serves 60-70 children in grades 1-6 in all areas of giftedness. Gifted children work both in their regular and a separate classroom with a teacher who monitors all contracts and products. In addition, children study conversational French.

## MT. GREYLOCK SCHOOL UNION

Lanesborough School  
188 Summer Street  
Lanesborough, MA 01237  
Contact: Raymond F. Glynn  
(413) 443-0027

The Lanesborough School has initiated an integrated program for 40 gifted and talented students from grades K-6. The entire staff has been trained in the identification, planning, implementation, and evaluation of gifted and talented students in all areas.

## LEE

Lee High School  
Greylock Street  
Lee, MA 01238  
Contact: William Bourdon  
(413) 243-2100

Lee High School reports there are 15 students in advanced placement English.

## LYNN

42 Franklin Street  
Lynn, MA 01902  
Contact: Mr. Johns  
(617) 598-9197

Lynn offers accelerated mathematics and science courses for grades 9-12. College bound students take algebra I in grade 9, algebra II and trigonometry in grade 10, analytical geometry and pre-calculus in grade 11, and calculus in grade 12.

## MANCHESTER

Lincoln Street  
Manchester, MA 01944  
Contact: Peter Hare, (617) 526-4919  
Mrs. Jermain, (617) 526-4494

A variety of enrichment courses meet once a week before, during, and after school in grades 4-6, and after school in grades 7 and 8. School staff and community members volunteer as teachers.

## MARSHFIELD

Governor Winslow School  
Marshfield, MA 02050  
Contact: Leo Dauwer  
(617) 837-2871

The Governor Winslow School provides enrichment activities through a resource teacher for 24 students in grades 1-5 in general academics. Student selection is based on classroom teacher recommendation. The program is currently CETA funded.

## MASCONOMET REGIONAL SCHOOL DISTRICT

Masconomet Junior/Senior High School  
R.F.D., Topsfield, MA 01983  
Contact: Stephen C. Smith  
(617) 887-2323

The program at Masconomet Junior and Senior High School consists of acceleration through the standard curriculum, homogeneous high ability grouping, limited enrichment, individualized experiences, and early graduation. Future plans are to identify gifted and talented students using national criteria and develop specific programs.

## MIDDLEBOROUGH

Junior and Senior High Schools  
Middleboro, MA 02346  
Contact: John McGovern  
(617) 697-6191

Project Contemporary Competitiveness, (P.C.C.) is a summer enrichment program offered to 25-30 children in grades 8 and 9 at Bridgewater State College. The six week resident course focuses on multi-area studies. Middleborough High School also offers advanced mathematics for students who excel.

## MILFORD

Milford High School  
West Fountain Street  
Milford, MA 01757  
Contact: Joyce Phillips  
(617) 473-0018 x114

Milford High School offers advanced placement modern European history and calculus courses to seniors.

## MILLBURY

Elmwood (3-5), Shaw Middle (6-8),  
High School (9-12)  
12 Martin Street  
Millbury, MA 01527  
Contact: Alfred J. Sylvia  
(617) 865-9501

The Elmwood School, Shaw Middle School, and high school provide advanced instructional programs for the academically talented. These range from algebra and French at the middle school to honors and advanced placement courses at the high school.

## MILLIS

Memorial School  
Main Street  
Millis, MA 02054  
Contact: Laurence W. Aronstein  
(617) 376-8681

Project Achievement is an independent program for 18 academically gifted 5th and 6th grade students. Individual projects are developed with the program director based on a child's interests. Students are encouraged to do original research, and to identify adult mentors who will work with them individually.



## MILLIS

Memorial Annex  
Plain Street  
Millis, MA 02054  
Contact: Ed Begley  
(617) 376-8221

Eight 3rd and 4th grade students participate in this enrichment program. Individual and small group projects are developed around students' interests. Twenty-six students participate in a Junior Great Books program.

## MILLIS

Clyde F. Brown School  
Park Road  
Millis, MA 02054  
Contact: Raymond T. Lanthier  
(617) 376-8050

Public and school libraries and a nearby planetarium supplement a science and social studies enrichment program for 5 2nd graders. Individual and composite reports assigned by the resource teacher sharpen skills in note-taking, outlining, and organizing and presenting information.

## MILLIS

Millis Jr., Sr. High School  
Plain Street  
Millis, MA 02054  
Contact: Paul A. Brunelle  
(617) 376-2912

Eligible students are identified through objective data and teacher recommendation for individually formulated programs based on their interests. Current activities target music, art, industrial arts, foreign language, and social studies.

## MONSON

Main Street School  
Monson, MA 01057  
Contact: J. M. Hatton  
(617) 267-4857

Program R.E.A.C.H. pilots an enrichment program for 37 students in grades 4, 5, and 6. Horizontal and vertical learning, based on students' interests, is encouraged.

## MONTAGUE

Sheffield School  
Crocker Avenue  
Turners Falls, MA 01376  
Contact: Daniel R. Morrison  
(413) 863-9324

Fifth and 6th graders must have a confirmed IQ of 125+ and be at least two years above grade level on achievement tests in areas of language arts, mathematics, and science to participate in this program. Students research, read, and report on selections from "Great Books" collections and design individual projects in art, drama, and other areas of interest to them.

## NAHANT

Nahant Junior High School  
Nahant, MA 01908  
Contact: Leonard F. Piazza  
(617) 581-1600

Nahant Junior High has an Expanded Enrichment Program (EEP) in the development stage. A committee, backed by the school committee and superintendent, hopes to complete a format and outline before next fall.

## NASHOBA REGIONAL SCHOOL DISTRICT

Nashoba Regional High School  
Bolton, MA 01740  
Contact: Don Willson  
(617) 779-2257

Juniors and seniors meeting certain requirements may enroll in two courses: American Cultures and Western Cultures. These team taught courses are designed to supplement the study of history and accelerated English and exempt students from their usual requirements. Students need the permission of the guidance, English, and social studies departments to take either course.

## NATICK

Natick Public Schools  
(system-wide)  
Natick, MA 01760  
Contact: Daniel Thomas  
(617) 653-0550

Natick will implement an elementary program in 1979-80 consisting of individualization, in-school cluster programming for K-3 and 4-6, and a pull-out program for some pupils in grades 4-6. Extended learning experiences will be provided in the classroom, with extra provision for creative and in-depth activities for the academically gifted in a pull-out program.

## NAUSET REGIONAL SCHOOL DISTRICT

Eastham Elementary School  
Schoolhouse Road  
Eastham, MA 02642  
Contact: Daniel Shay  
(617) 255-0808

Eastham emphasizes acceleration rather than enrichment in their curriculum. Teachers plan expectations for the children identified through a screening process.

## NAUSET REGIONAL SCHOOL DISTRICT

Nauset Regional Middle School  
Route 28  
Orleans, MA 02653  
Contact: John Stewart  
(617) 255-0016

The Academically Advanced and Talented Student Program at Nauset Regional Middle School services children in grades 5-8 in the regular classroom. Children spend from 5% to 20% of their time with a teacher-coordinator or mentor and are given an opportunity to broaden their scope, accelerate their pace, and explore new areas of interest.

## NAUSET REGIONAL SCHOOL DISTRICT

Brewster Elementary School  
Underpass Road  
Brewster, MA 02631  
Contact: Richard Bridgewood  
(617) 896-5933

At Brewster Elementary School, 2 volunteer senior citizens offer instruction in chess to 28 3rd and 4th grade students. Children are chosen by the teacher because they possess an interest in chess and are proficient in mathematics.

## NEEDHAM

1330 Highland Avenue  
Needham, MA 02192  
Contact: Walter R. Nagle  
(617) 444-4100

The Needham program is currently in the planning stage. Present needs are being met by each child's classroom teacher and available resource personnel. The screening process will begin in the fall of 1979 for grades 1-6. The target date for a grade 4-6 program is January 1980.

## NEW BEDFORD

455 County Street  
New Bedford, MA 02740  
Contact: Grace Frey  
(617) 997-4511 x270

New Bedford has 2 programs. One offers full-time enrichment for grades 4, 5, and 6. The second, called the Talented and Gifted Magnet Resource Program (TAG), provides alternatives for 126 4th, 5th, and 6th graders from diverse ethnic and racial backgrounds. The magnet center uses interdisciplinary and individualized learning to stimulate academic and personal growth, and appreciation of varied life styles.



#### NORTH ANDOVER

North Andover High School  
675 Chickering Road  
North Andover, MA 01845  
Contact: Thomas L. Regan  
(617) 682-3122

North Andover juniors and seniors may participate in courses at Merrimack College.

#### NORTHBOROUGH

Bartlett Street  
Northborough, MA 01532  
Contact: Dennis DiSalvo  
(617) 393-2188

Fourth and 5th grade pupils involved in Project GAIN spend 30% of the time outside their classroom under the resource teacher's direction. This teacher also coordinates activities with parents and classroom teachers.

#### NORTHBRIDGE

Northbridge Primary School  
14 Hill Street  
Whitinsville, MA 01588  
Contact: Dwain Robbins  
(617) 234-6346

The Jets, an accelerated group of kindergarteners, receive individualized academic and enrichment work in a class integrated with other students.

#### NORTHBRIDGE

W. Edward Balmer School  
Crescent Street  
Whitinsville, MA 01588  
Contact: Thomas P. McMurray  
(617) 234-8161

A reading director and a mathematics coordinator regularly monitor 24 students, grades 3-6, involved in an enrichment program.

#### NORTH CENTRAL MASSACHUSETTS

Petersham Center School  
Spring Street  
Petersham, MA 01366  
Contact: Joanne K. Potee  
(617) 724-3363

Youngsters from grades 2-6, selected on the basis of mental aptitude and achievement test scores compose Discovery Groups I and II. Areas of study have included Egyptian art and culture, and Greek mythology with field trips to the Boston Museum of Fine Arts and the Harvard Forest Museum. Plans for the spring include studying the geology and structure of Petersham a hundred years ago.

#### NORTH MIDDLESEX REGIONAL

Spaulding Middle School  
1 Whitcomb Street  
Townsend, MA 01469  
Contact: Norman W. May  
(617) 597-8502

The Spaulding Middle School program is in the preliminary stages of developing programming for gifted and talented children. They are currently gathering basic data and visiting other school programs.

#### NORWOOD

Balch Elementary School  
Washington Street  
Norwood, MA 02062  
Contact: Andrew Ciarletta  
(617) 762-0694

Project BERG (Balch Elementary Reading Group) is a reading enrichment program for gifted students, grades 1-6. It presently serves 55 pupils who meet with the librarian once a week for one half hour.

## OAKHAM

Oakham Center School  
Deacon Allen Drive  
Oakham, MA 01068  
Contact: Mark Steina  
(617) 882-3392 & 3393

Oakham Center School's enrichment program is taught by several teachers each knowledgeable in a particular area. Classes include basketry, rockets, photography, music, and film. The classes are open to 4th, 5th and 6th graders who are assigned individual contracts.

## OLD ROCHESTER REGIONAL SCHOOL DISTRICT

Old Rochester Regional Junior  
High School  
Marion Road  
Mattapoisett, MA 02739  
Contact: James M. Pasquill  
(617) 758-3745

The Old Rochester School System's program for 5 mathematically gifted students in grade 7 stimulates reasoning abilities and encourages lateral enrichment rather than acceleration. Pupils, identified through tests and teacher recommendations, study functions and graphs, logarithms, polygons, statistics, and topography.

## ORANGE

Dexter Park/Butterfield/Gale  
Brooks Schools  
Orange, MA 01364  
Contact: Eugene T. McNamara  
(617) 544-6980

A volunteer group of teachers offers enrichment to 13 students, grades 2-6, in conversational French, Spanish, guitar instruction, photography, and creative writing. A gifted child may take one or all of the activities or develop an individual project.

## PEABODY

Farnsworth School  
105 Central Street  
Peabody, MA 01960  
Contact: Phyllis M. Rantz  
(617) 531-1600 x178

The Farnsworth model includes two self-contained combination classes of gifted students: 22 2nd and 3rd graders, and 25 5th and 6th graders. Creative and critical processes applicable to the arts are fundamental to the program. Mainstreaming occurs in mini-courses using the unique talents of the teachers.

## PITTSFIELD

269 First Street  
Pittsfield, MA 01201  
Contact: John A. Kreiger  
(413) 499-1234 x342

Higher ability students in grades 7, 8, and 9 are homogeneously grouped for accelerated studies in English, mathematics, social studies and science. At the high school level honors and advanced placement courses feature acceleration, ability grouping of students, and additional periods beyond the conventional 5 per week.

## PROVINCETOWN

Winslow Street  
Provincetown, MA 02657  
Contact: Frederick G. Bardsley  
(617) 487-0560

An educational plan is designed for each identified gifted child. Options vary and include anything from special projects to high school courses.

## RAYNHAM

Center School  
South Main Street  
Raynham, MA 02767  
Contact: William J. Sullivan  
(617) 824-7671

The Center School offers an enrichment reading program for early elementary children, coupled with their regular reading program, that fosters the interest of the gifted youngsters.



## REHOBOTH

Anawan/Palmer River School  
300 Winthrop Street  
Rehoboth, MA 02769  
Contact: A. L. St. John  
(617) 252-3311

The art history program serves about 10 students in the 2nd and 3rd grades who show special talent or interest in art. The instructional portion of each lesson involves looking at the works of an artist, followed by a "hands-on project" completed in the representative style of that artist.

## REVERE

Whelan School  
107 Newhall Street  
Revere, MA 02151  
Contact: Catherine A. Romano  
(617) 289-9200 x166

Revere has 80 pupils in the 5th and 6th grade involved in an academically talented program for one day a week.

## ROCKLAND

99 Church Street  
Rockland, MA 02370  
Contact: Louis B. Dovner  
(617) 878-4340

Rockland provides horizontal enrichment opportunities for pupils in grades 4-8 in each school's specially equipped resource center. Intermediate core evaluations and educational plans are offered for participating pupils. IQ is not a factor for child selection.

## SALEM

School Administration Building  
1 Broad Street  
Salem, MA 01970  
Contact: Joseph S. Salerno  
(617) 744-0441

Salem's TAG (Talented and Gifted) program features a unique selection process and varied curriculum choices in settings ranging from high school and college campuses, to museums and community resources. This enrichment program serves students through the 8th grade.

## SHARON

Sharon Intermediate School  
South Main Street  
Sharon, MA 02067  
Contact: Morton Kaufman  
Clista Dow  
(617) 784-2971

Approximately 50 academically and creatively talented 5th and 6th grade students participate in Sharon's enrichment program. Homogeneous and heterogeneous groupings meet cognitive and affective needs. An enrichment program for children talented in music and art is in the first year of development.

## SHERBORN

Pine Hill School  
Pine Hill Lane  
Sherborn, MA 01770  
Contact: Robert Luther  
(617) 655-0630

Presently, there is no program in operation. September of 1979 is a target date for an enrichment program in mathematics for academically talented students in grades 5 and 6.

## SHREWSBURY

100 Maple Avenue  
Shrewsbury, MA 01545  
Contact: Mrs. Wallace Perkins  
(617) 845-7511

The Shrewsbury enrichment program serves nearly 200 K-6 gifted students in varying degrees, mostly within their regular classrooms. Teachers representing major elementary subject areas meet monthly to develop curriculum for the program. Also, special separate gifted classes are provided in the summer and late afternoons.

SILVER LAKE REGIONAL  
SCHOOL DISTRICT

130 Pembroke Street  
Kingston, MA 02364  
Contact: Albert F. Argenziano  
(617) 585-4313

SPENCER-EAST BROOKFIELD REGIONAL  
SCHOOL DISTRICT

302 Main Street  
Spencer, MA 01562  
Contact: Edward R. O'Connor  
(617) 885-6331

SPENCER

Lake Street School  
Spencer, MA 01562  
Contact: Mary E. Madden  
(617) 885-6352

SPRINGFIELD

Howard Street School  
195 State Street  
Springfield, MA 01105  
Contact: Julia Hooben  
(413) 733-5711

SPRINGFIELD

Thomas M. Balliet School  
111 Seymour Avenue  
Springfield, MA 01109  
Contact: Ms. Wiley  
(413) 783-1817

STONEHAM

Stoneham Junior and Senior High  
Schools  
Stoneham, MA 02180  
Contact: Donald P. Musico (English)  
Joan L'Heureux (French)  
Chester P. Jordan (Math-  
ematics)  
Thomas C. Cleary (Science)  
(617) 438-0646

Silver Lake Regional School District reports a program for gifted and talented children to begin this summer (1979) at the secondary level.

For several years, the Spencer (K-8) and Spencer-East Brookfield (9-12) school systems have been identifying gifted students and finding ways to challenge them. Approximately 5% of the 2500 students have been identified as gifted, talented, or accelerated.

The Lake Street School homogeneously groups gifted children, grades 1-4 in one classroom. The teacher provides enrichment activities in language arts, social studies, science, and mathematics. Some community resource people appear as guest speakers during the year.

This Chapter 636 funded program extends the horizons of talented children, kindergarten through grade 4. Student progress is measured by: increases in abstract thinking, experimentation, creative interpretation, and leadership through multi-cultural activities. A resource teacher and media specialist encourage innovation and the use of creative media in the regular classroom.

The language arts enrichment program emphasizes creative writing, reading enrichment, conversation improvement, and literary appreciation. The program serves approximately 50 children in grades K-4.

Stoneham provides honors programs in English, French, mathematics, and science involving considerable enrichment and acceleration to students demonstrating outstanding achievement and scholarship. In all cases, the approval of the department chairman is required.



## STOUGHTON

Stoughton High School  
232 Pearl Street  
Stoughton, MA 02072  
Contact: Robert J. McLaughlin  
(617) 344-4000 x43

Stoughton offers honors courses for high school students. Depending on grade level, students enroll in honors sections of English, mathematics, science, and social studies.

## TEWKSBURY\*

(involves 6 schools)  
1469 Andover Street  
Tewksbury, MA 01876  
Contact: Edward J. Farley  
(617) 851-7347

Tewksbury Project Enterprise is an after school program coordinated by the Merrimack Education Center. Three percent of grades 2 through 6 have been identified. Teachers receive a stipend and work with 80 identified students, grades 2-6, on individual contracts. The five participating communities believe that parent involvement is vital.

## TRURO

Truro Central School  
Rte. 6  
Truro, MA 02666  
Contact: William Keane  
(617) 487-1558

The Truro Central School reports a program for gifted and talented children in grades K-6. Approximately 9 children, identified through testing and teacher recommendations, work with a resource teacher on individualized programs.

## VINEYARD HAVEN

Tisbury Elementary School  
P.O. Box 878  
Vineyard Haven, MA 02568  
Contact: Bettie Davis  
(617) 693-0228

The Tisbury Elementary School provides several programs for gifted students. A freshman level algebra course is offered to 20 8th grade students. Latin I is a basic course for gifted 6th, 7th, and 8th grader taught by community volunteers. A mathematics enrichment program provides "hands-on" experiences to 35 students in grades 1-4. Tests and individual conferences monitor progress.

## WATERTOWN

30 Common Street  
Watertown, MA 02172  
Contact: Ann Marie Jones  
(617) 926-7700

Watertown offers high school advanced placement classes in calculus and U.S. History. Those who pass a college board advanced placement examination in mathematics earn college credit. Varied interpretations of major themes in American History are pursued through a wide range of readings, analytical papers, book reviews, and research projects.

## WEST BRIDGEWATER

West Bridgewater Junior  
and Senior High School  
West Center Street  
West Bridgewater, MA 02379  
Contact: Erick Benson  
(617) 583-7502

Project Contemporary Competitiveness, Inc. is an advanced placement summer program for high school students from several communities. A maximum of 320 students are selected on past achievement; test results; interest in subject area; and teacher, guidance, or principal recommendation.

\*See also Merrimack Education Center, Project Enterprise, page 49.

## WESTFORD\*

35 Town Farm Road  
Westford, MA 01886  
Contact: John A. Crisafulli  
(617) 692-4783

The staff of Project Enterprise (funded by the Merrimack Education Center) work with 80 pupils in grades 2-6 on individual contracts after school and in small groups. CETA funded Project LEAP involves 30 other students in grades 2-8. Approximately 20% of their class time is spent on contract work. Identification is based upon IQ and achievement test scores for both programs.

## WEST YARMOUTH

Marguerite E. Small Elementary School  
440 Higgins Crowell Road  
West Yarmouth, MA 02673  
Contact: Charles Orloff  
(617) 775-5233

The Small School offers several programs for their gifted 4th, 5th, and 6th graders. Twenty-two 4th and 5th graders participate in an advanced recorder class. Students with well developed study and research skills and unusually high motivation may take a course in the history of Cape Cod. Most participants in the abacus program have scored above the 95th percentile in their previous SRA test.

## WEYMOUTH

111 Middle Street  
East Weymouth, MA 02189  
Contact: Leon H. Farrin  
(617) 335-1460

The Level I Honors Program is an extension of the traditional ability-grouping system that has been in use in grades 7, 8, and 9 for a number of years. The program groups those students in each grade who are capable of handling an enriched, more challenging program, but still within the boundaries of the standard junior high curriculum.

## WEYMOUTH

Seach School  
Weymouth, MA 02189  
Contact: John P. Hackett  
(617) 335-1460

Thirty 4th, 5th and 6th graders from different schools explore metrics, film making, philosophy, fine arts and other interests at a resource center. Through such enrichment students develop confidence and curiosity to expand their own horizons through independent study.

## WHITMAN

West Middle School  
Corthell Avenue  
Whitman, MA 02382  
Contact: John F. DeCosta,  
(617) 447-4408

The Academically Talented program brings gifted 4th-7th grade students from their home school to a resource room. The two resource teachers emphasize research skills, enrichment, and creativity. It is expected this program will include 8th graders during the 1979-80 school year.

## WILBRAHAM

Memorial and Soule Road Schools  
Wilbraham, MA 01095  
Contact: Robert Lash, Memorial,  
(413) 596-6821  
Jack Pedace, Soule Road,  
(413) 596-9311

This program serves children in 2 transitional schools grades 4-6, displaying extraordinary abilities in the areas of creativity, intellect, and leadership with learning opportunities focusing on enrichment. Enrichment activities challenge the gifted child through a variety of intensive problem solving situations.



## WILMINGTON\*

159 Church Street  
Wilmington, MA 01887  
Contact: Derek R. Little  
(617) 658-4241

Following appropriate screening and identification, gifted and talented students in grades 4-7 meet regularly with a teacher who guides their participation in a mentor program through individual learning contracts. Contracts are based on the child's interests, and reviewed and evaluated on a regular basis.

## WOBURN

Woburn High School  
88 Montvale Avenue  
Woburn, MA 01801  
Contact: William Shaw  
(617) 933-8050 x114

The Woburn public schools report advanced placement courses in the following areas of the curriculum: foreign languages, science, mathematics, English, music, and social science.

## WORCESTER

piloting in 6 schools  
20 Irving Street  
Worcester, MA 01609  
Contact: Betsy Burnes McCarthy  
(617) 754-5397

Worcester is piloting a "pull-out" program in 6 elementary schools for 93 children in grades 1-6. General exploratory activities, learning centers, games and simulations, and independent study provide a differentiated curriculum. Identification techniques include standardized testing; and teacher, peer, and specialist nomination. Other program aspects include teacher training, parent education, and evaluation.

# **SECTION IV**

## **RESOURCES**



## **TEACHER TRAINING OPPORTUNITIES**

IN MASSACHUSETTS

ANTIOCH GRADUATE CENTER, INSTITUTE OF OPEN EDUCATION

Contact: Gerri Moore, Director of Academic Programs, Antioch Graduate Center,  
133 Mount Auburn Street, Cambridge, MA 02138, (617) 492-5108

Courses offered by the Antioch Graduate Center are generated by student request. A group of teachers interested in gifted and talented education could arrange for a one-semester course through the Institute. With the needs of the group clearly defined, the Institute provides a faculty member with the appropriate background. Classes are held at the Institute or the teachers' school. Successful participants receive 3 graduate credits. The cost is \$350 per student, and at least ten students must participate.

BOSTON COLLEGE

Contact: Katherine Cotter, Coordinator, M.Ed. Program: Education of the Gifted,  
Boston College, Graduate School of Arts and Sciences, Campion 309,  
Chestnut Hill, MA 02167 (617) 969-0100 x4223

Boston College offers programs leading to a Master of Education degree. Programs are designed on an individual basis to train teachers, administrators, and others for responsible roles in schools and related settings. Courses and field experiences include: Psychology of the Gifted, Teaching the Gifted, Humanistic Education, Symposia on Giftedness, Psychology and Education of Creative People, student teaching, and special projects. Thirty credits are normally required for the M.Ed. and CAES. Student teaching requires an additional 6 credits. Those not interested in the degree may enroll in specific courses as special students.

BOSTON STATE COLLEGE

Contact: Varda Konstam, Boston State College, 625 Huntington Avenue, Boston, MA 02115  
(617) 731-3300 x350

Boston State College is contemplating the development of a gifted program. At present they offer:

PY415 Psychology of Creativity

A review of current research in the general area of creativity emphasizing experimental investigation and empirical findings.

BRIDGEWATER STATE COLLEGE

Contact: Division of Professional Education, Bridgewater State College, Department of Educational Services, Bridgewater, MA 02324 (617) 697-8321

Three courses are available in the area of the gifted and talented. Courses are sometimes offered at locations other than on campus and arrangements can be made for their being available as on-site inservice courses for elementary and secondary teachers.

- 1) SE415, Methods and Materials for the Academically Talented, focuses on the identification and placement of gifted pupils in schools and enrichment activities, creative development, methods and materials, modified curriculum, administration, motivation, and treatment of underachievement.
- 2) ED545, Curriculum Development for the Academically Talented Student, surveys current curricula status and problems facing the academically talented student; studies techniques for modifying curricula; examines methods of evaluating curriculum's effectiveness; researches local and regional resources.
- 3) EE556, Curriculum for the Gifted Child in Elementary Schools, looks at new trends and practices in curriculum development. Local, regional, state, and national movements are examined. Students study curriculum problems and build a curriculum.

CURRY COLLEGE

Contact: Gertrude M. Webb, Curry College, Milton, MA 02186 (617) 333-0500

## CURRY COLLEGE, (continued)

Curry offers two courses in gifted education and may have more offerings in the near future.

- 1) Ed 499G Introduction to the Gifted Part I is designed to help teachers screen, identify, and program the gifted in the regular classroom. The course stresses curricular modifications to stimulate creative and productive thinking.
- 2) Ed 449G Introduction to the Gifted Part II explores in greater depth the problems and issues around the identification of potentially gifted and talented children from culturally different or disadvantaged homes. Creativity and talents in the arts are examined and students are encouraged to design an independent project.

## EDUCATIONAL COLLABORATIVE OF GREATER BOSTON (EDCO)

Contact: Judi Sandler, Project Director, Educational Collaborative of Greater Boston (EDCO)  
20 Kent Street, Brookline, MA 02146 (617) 738-5600

EDCO has sponsored workshops and conferences on this topic in the past. In the spring of 1979 they will be developing a newsletter geared to gifted and talented educators.

## EASTERN NAZARENE COLLEGE

Contact: Sandi Lawler, Talented and Gifted Magnet Information Center, University of Massachusetts/Harbor Campus, Boston, MA 02125 (617) 287-1900 x2381

Eastern Nazarene is sponsoring a 6-day workshop this summer during the third week in July with Sandi Lawler of the University of Massachusetts/Boston Gifted and Talented Dissemination Center. The course is geared to classroom teachers, principals, and administrators contemplating starting programs for gifted and talented students. Topics will include: organizing planning teams, developing needs assessments, developing program goals, identifying gifted students, starting and maintaining the program. Three graduate credits will be offered with class sessions from 8:00-4:00 each day.

## EMMANUEL COLLEGE

Contact: Michele Russo, Institute Coordinator, Emmanuel College, 400 The Fenway  
Boston, MA 02115 (617) 277-9340 x171

Each year Emmanuel College offers a graduate level institute to professional educators on the subject of gifted and talented education. This year's institute, Teaching the Gifted and Talented: Program Development - Curriculum Activities, was held March 31 and April 1 on the Emmanuel campus. Institutes have featured such nationally-known professionals as Irving S. Sato, Director of the Leadership Training Institute on the Gifted and Talented, and Sandra Kaplan author of Providing Programs for the Gifted and Talented. Participants can arrange to receive 3 or 4 graduate credits or can attend for no credit. Information about future institutes can be obtained by calling the Institute Office.

## FRAMINGHAM STATE COLLEGE

Contact: Framingham State College, Division of Continuing Education and Special Programs,  
Framingham, MA 01701 (617) 620-1441

In the spring of 1979, the Division offered 14.666/14.866 Education of the Gifted and Talented. This course covers social and cultural factors, screening, identification, educational characteristics, and strategies pertinent to developing effective programs for gifted children. This course may be offered again in future semesters.

## HAMPSHIRE EDUCATIONAL COLLABORATIVE (HEC)

Contact: Mary Ellis Wilson, Inservice Coordinator, Hampshire Educational Collaborative (HEC), 127 Russell Street, Hadley, MA 01053 (413) 586-4590



## HAMPSHIRE EDUCATIONAL COLLABORATIVE (HEC) (continued)

HEC has coordinated workshops or seminars in gifted and talented education. Future plans are indefinite right now. They do however, maintain a resource bank of consultants who are available to train teachers of gifted and talented students.

## LESLEY COLLEGE

Contact: June Fox, (Education), (617) 547-8844; Shaun McNiff, (The Arts), (617) 354-4400  
Lesley College, Graduate School, 29 Everett Street, Cambridge, MA 02238

The Lesley College master's degree program, Educating the Gifted and Talented, responds to the need to provide a challenging program which can offer new and stimulating approaches to the teaching of the gifted and talented in our elementary schools. Through a sequence of courses offered by the Department of Education and Education Communication, students will study a range of strategies that may be used to organize daily instruction in reading, language, mathematics, science, and other subject areas. Through the offerings of the Arts Institute, students will examine the nature of talent and will explore the strategies that may be used in elementary schools to discover unique talents and foster their growth and development. Students need not have background in the arts previous to entrance into the program. Several courses offered in the Education and the Arts areas will include a study of the components of giftedness and the problems, issues, and concerns teachers and administrators must grapple with in implementing programs for the gifted and talented. One of the unique features of the degree program is its flexibility. Each student will be encouraged to design an individually supervised segment of his or her program so that a range of interests and needs are met.

## MASSACHUSETTS COLLEGE OF ART

Contact: Diana Korzenik, Chairman, Art Education Department, Massachusetts College of Art, 364 Brookline Avenue, Boston, MA 02215, (617) 731-2340

While Massachusetts College of Art does not offer courses specifically geared to teachers of gifted and talented students in art, the art education programs train teachers to work with students at any level of ability. Prior to full-time student teaching, art education majors teach high school students enrolled in Saturday art classes at the college. These adolescents are recommended by their high school art teachers as being talented in art. This provides a lab teaching situation for Massachusetts College of Art students while creating a college learning experience for highly-motivated artistic students.

## MERRIMACK EDUCATION CENTER (MEC)

Contact: Carol Mazuy, MEC, 101 Mill Road, Chelmsford, MA 01824 (617) 256-3785  
See description on pg. 49.

## NORTH ADAMS STATE COLLEGE

Contact: Office of Graduate and Continuing Education, North Adams State College, North Adams, MA 01247 (413) 664-4511 x237

North Adams offers one evening course during their regular spring and fall semesters and one course in the summer as part of their seminars for educators series. The summer seminar may not be offered again in future summers.

- 1) ED9630-1, The Education of Gifted and Talented Children, K-12, surveys issues, research, and methods regarding the education of gifted and talented children. Topics include: the rationale and procedures for case study, identification procedures, program planning, instructional models and methods, proposal planning, and community relations. Each participant designs a program for their home school or institution.



- 2) ED9631, Methods and Materials of Teaching the Gifted and Talented, examines current curriculum theory, materials, and teaching strategies for planning appropriate learning activities for the gifted and talented. Special emphasis is placed on the development of generalized and specific educational plans for individuals and groups. Through lectures, discussions, simulation activities, and hands-on experiences, participants explore, develop plans for, and implement materials for individual needs. July 9-20, 1979, Monday-Friday, 8:30 a.m - 12:30 p.m. Regular tuition rates apply.

#### PROJECT PRISM

Contact: Andrea Graff, Resource Specialist, Project PRISM, 37 West Main Street,  
Norton, MA 02766 (617) 285-3718

PRISM provides a variety of services to teachers including workshops; resource materials and assistance to teachers with independent study and mentorship programs, curriculum adaptations, and in-school mini-courses. Their first responsibility is to member school districts, but, as time permits, PRISM staff address groups, run workshops, or consult with school personnel in districts beyond PRISM's boundaries. See also pg. 19.

#### SALEM STATE COLLEGE

Contact: Jim Anderson, Northeast Regional Education Center. Danvers State Hospital,  
Middleton, MA 01949 (617) 777-3500, 3501, 3502

Courses in educating the academically talented child have been offered through the Northeast Consortium for Staff Development in conjunction with Salem State College, and similar courses are expected to be offered in the future. The following course was offered last summer:

N.E. 927 The Education of the Academically Talented Child-Part II is a curriculum workshop focusing on 1) principles of curriculum planning and program change, 2) current techniques and strategies used with gifted children and 3) materials to assess the needs of talented children and test out action plans for practicality and value.

#### SMITH COLLEGE

Contact: Graduate Studies Office, College Hall, Smith College, Northampton, MA 01063  
(413) 584-2700 x369

Education of the Gifted, offered during the spring semester in the evening, discusses the nature and identification of the gifted, special school programs, and curricular approaches for intellectually gifted and talented students.

#### THE EDUCATION COOPERATIVE (TEC)

Contact: Harriet K. Goldin, Consultant in Gifted and Talented Education, Memorial School  
Eliot Street, South Natick, MA 01760 (617) 653-4300 or 237-3028

TEC provides services in staff and program development, inservice training, and grant writing for educators of the gifted and talented. TEC is primarily responsible to its member towns but some services are available to people in schools outside the TEC area with financial arrangements negotiated individually.

#### UNIVERSITY OF MASSACHUSETTS AT AMHERST

Contact: Division of Continuing Education, University of Massachusetts at Amherst,  
Amherst, MA 01002 (413) 549-4970

In the 1979 summer session EDUC1572 Teaching Reading to Special Populations K-12 will focus on approaches to the teaching of reading to such special populations as the

disadvantaged, the gifted, and the emotionally disturbed. The course stresses individualized and experience approaches and one group is studied intensively. Participants must have teaching experience or taken a methods course. The course runs from June 25 to July 13, 1979 with classes from 9:00 a.m. to noon, Monday through Friday.

#### WHEELLOCK COLLEGE

Contact: Office of Continuing Education, Wheelock College, 200 The Riverway,  
Boston, MA 02215 (617) 734-5200 x160

An evening graduate course, Education of the Gifted and Talented, studies gifted and talented children from theoretical, curricular, and instructional perspectives. Topics include: the nature and developmental characteristics of gifted and talented children, identification and placement in the school, creative development, curricular strategies, enrichment activities, methods and materials, organizational strategies for the gifted and talented in the elementary school, cultural differences, and guidance and evaluation of gifted and talented children.

#### WORCESTER STATE COLLEGE

Contact: David Quist, Associate Dean, Graduate Education  
A. Barbara Pilon, Director, Gifted Child Center  
Worcester State College, Division of Graduate Education and Special Programs,  
486 Chandler Street, Worcester, MA 01602 (617) 752-7700

The following courses are offered through the Division of Graduate and Continuing Education at Worcester State or one of their off-campus locations:

- 1) ED7-415 Education of the Gifted examines the identification, characteristics, and personality factors of the gifted; the teacher's role and various organizational patterns; and innovative procedures and techniques to nurture creativity. Prerequisites: Child Growth and Development or Psychology of Adolescence.
- 2) ED9-409 The Gifted Child discusses methods for identifying the gifted student; characteristics and personal factors of the gifted; techniques and approaches for curriculum development, classroom work, and individual development of the gifted child; reports of research on the gifted; and techniques for developing the gifts of children.
- 3) Seminar: Awareness and Observation of Techniques in Working With the Gifted in Language Arts/Reading helps teachers develop competencies in working with elementary pupils gifted in language arts and reading. Candidates read widely in the field to understand the particular needs of gifted children. Participants also observe strategies and materials used by staff working with gifted children and discuss their value in seminar periods. Additionally, candidates are required to select materials, prepare lessons, and present a language arts problem that will challenge youngsters in the enrichment program held at Worcester State.\* The seminar is limited to fifteen teachers.

\*Worcester State College has a Gifted Child Center in language arts and reading. Children attend a Saturday morning enrichment program throughout the school year. The center is staffed by experienced teachers enrolled in a graduate program at the college. The center is also used by teachers enrolled in the seminar described above.



## GRADUATE DEGREE PROGRAMS IN OTHER STATES

### PURDUE UNIVERSITY

Contact: John F. Feldhusen, Professor of Education and Psychological Sciences,  
Department of Education, Purdue University, West Lafayette, IN 47907  
(317) 749-2844

The doctoral program prepares candidates to assume positions in colleges and universities where they will teach courses for teachers in educating the gifted, creative, and talented; carry out field activities with public schools in organizing programs; work with state agencies; and conduct research and evaluation. The programs of study are designed to meet the individual needs and goals of each candidate.

### TEACHERS COLLEGE, COLUMBIA UNIVERSITY

Contact: Abraham J. Tannenbaum, Major Advisor, Teachers College, Columbia University,  
Box 218, New York, NY 10027 (212) 678-3865/3866

Teachers College, Columbia University offers a masters and doctoral program in the education of the gifted and talented. The Master of Arts program combines two major innovations. First, enrollees combine specialized training to teach the gifted and talented with a scholarly foundation in one academic area of study. Secondly, each student receives special guidance in designing a new curriculum for the gifted in the substantive area he or she has chosen. The doctoral program takes into consideration the variety of educational settings and services as well as the disparate roles and responsibilities for which the personnel must be prepared. It is therefore an integral part of the total special education offerings at Teachers College and is further strengthened by courses offered in other departments.

### UNIVERSITY OF CONNECTICUT

Contact: Joseph Renzulli, Professor of Educational Psychology, School of Education,  
University of Connecticut, Box U-64, Storrs, CT 26268 (203) 486-4032

The Teaching the Talented (TTT) Program is a graduate program which prepares teachers and leadership personnel interested in various aspects of programming for exceptionally able children and youth. Depending upon each student's background and professional objectives the program trains persons for roles as teachers, pupil personnel specialists, program developers, curriculum development specialists, and directors or coordinators of school programs for the gifted and talented. Students may pursue the Master of Arts Degree, the sixth year Diploma in Professional Education, or the Doctor of Philosophy Degree. The program generally consists of: 1) core courses dealing with the psychology and education of gifted, talented, and creative individuals; 2) course work in related areas of study; and 3) internship and practicum experiences.

### UNIVERSITY OF GEORGIA

Contact: Catherine Bruch, Professor of Educational Psychology, Department of Educational Psychology, University of Georgia, Athens, GA 30602 (404) 542-4110

Graduate programs in education of the gifted and the talented range from minimum coursework required for Georgia supplementary certification through a more comprehensive University of Georgia approved certification program and a master's degree program (M.Ed. or M.A.), to a doctoral program (Ed.D.). Gifted/Talented Education may also be accepted as a minor area of concentration in the Ph.D. program in Educational Psychology. The program is planned so that intermediate steps in achieving the doctoral degree may incorporate achievement of either of the two master's degrees, fulfillment of public school teaching requirements in Georgia, fifth year or sixth year specialist programs, and Georgia supplementary certification in the gifted and talented.

#### UNIVERSITY OF SOUTH FLORIDA

contact: Linda Addison, Coordinator - Gifted Education, Gifted Education Department,  
University of South Florida, FAO 170, Tampa, FL 33620 (813) 974-2100 x241

The University of South Florida has evolved a program in teacher training that views education as a lifelong pursuit. Teaching is seen as the process of continuing learning at its highest level, that of a teacher sharing learning with others -- the students. Education for prospective teachers of the gifted is viewed as a unique experience including four major areas: professional preparation, the specialization, the liberal arts, and the field of work. Successful completion of the program leads to a Master's Degree for either experienced or inexperienced teachers or an Education Specialist Degree for students seeking administrative roles.

#### GRADUATE LEADERSHIP EDUCATION PROJECT FOR THE GIFTED AND TALENTED

contact: Elizabeth Newman, Project Coordinator, Teachers College, Columbia University,  
Box 218, New York, NY 10027 (212) 678-3865

The Graduate Leadership Education Project (GLEP) is a collaborative effort among seven universities on behalf of gifted and talented children. The major emphasis of GLEP is extensive graduate level training for new generations of leaders who will give direction and maintain vitality in the field of education for the gifted and talented. Those nominated for traineeship support by an independent panel of judges are then eligible for a stipend covering a year's study. They must be admitted in good standing to a graduate program leading to an advanced degree in gifted and talented education at any of the seven participating institutions. While completing degree requirements at the participating institution, the trainee is required to participate in an annual institute with other trainees, and take an advanced practicum as part of his or her degree program. The participating institutions include the five universities described above, and:

#### UNIVERSITY OF KANSAS

Reva Jenkins, Chairperson  
Educational Psychology and Research  
School of Education-Bailey Hall  
Lawrence, KS 66045 (913) 864-4526

#### UNIVERSITY OF VIRGINIA

Virgil S. Ward  
Professor of Education  
The Curry Memorial School of Education  
Charlottesville, VA 22903 (804) 924-7471



# NATIONAL AND STATE ORGANIZATIONS

## THE AMERICAN ASSOCIATION FOR GIFTED CHILDREN (AAGC)

15 Gramercy Park  
New York, NY 10003  
(212) 473-4266

Contacts: Marjorie L. Craig,  
Vice President and  
Executive Director  
Gail Robinson, Staff  
Associate

## AMERICAN MENSA LIMITED

1701 West 3rd Street  
Suite 1-R  
Brooklyn, NY 11223  
(212) 376-1925

## EDUCATIONAL CONSULTING ASSOCIATES (ECA)

3311 South Broadway  
Suite 204  
Englewood, CO 80110  
(303) 789-2219

## EDUCATIONAL PSYCHOLOGY AND RESEARCH DEPARTMENT

University of Kansas  
6 Bailey Hall  
Lawrence, KS 66045  
(913) 864-4526  
Contact: Reva Jenkins

## ELA PARENTS ASSOCIATION (EXTRAORDINARY LEARNING ABILITY)

785 Park Avenue  
Bloomfield, CT 06002  
Contact: Lynn Niro, President

AAGC is a non-profit organization striving to increase public awareness of the special needs of the gifted and talented. The association's program places particular emphasis on cooperation with community and professional groups. Special materials for parents, teachers, librarians, and others are published. Membership is available to all interested in helping develop opportunities for the gifted. Other activities include a scholarship program, a study on the health of the gifted, and a project on fine arts.

An international society of 28,000 members, Mensa helps intelligent people contact and communicate with one another. A selection criteria for membership is an intelligence test score higher than 98% of the general population. Membership is representative of many occupations and age groups.

Educational Consulting Associates offers staff development, seminars, and conferences on gifted education. ECA has a staff of highly selected consultants from throughout the U.S. and Canada who conduct staff development days or inservice training workshops.

Research focuses on creativity among gifted and talented students at the elementary level. Methods and materials for stimulating independent and self-directed learning are being studied. Workshops and inservice sessions are available from the Department.

The Bloomfield Parents Association is the parent organization of the Extra Learning Activities Program for the intellectually gifted in grades 1-7. The program's focus is on developing divergent and critical thinking skills; and increasing self-motivation, self-esteem, and student interaction with peers. The program provides differentiated instruction and differentiated teaching strategies.

NATIONAL AND STATE ORGANIZATIONS (cont.)

ERIC CLEARINGHOUSE ON THE  
GIFTED AND TALENTED

The Council for Exceptional Children  
1920 Association Drive  
Reston, VA 22091

Contact: Lynn Smarte, Information  
Specialist  
(800) 336-3728

CEC/ERIC can provide information on programming for the gifted through publications, topical bibliographies, and custom computer searches. Thirteen publications are currently available, including Gifted and Talented: Developing Elementary and Secondary School Programs, and The Identification of the Gifted and Talented. Nine topical bibliographies on topics such as programs, teaching methods, and identification are also available. A complete list of publications and topical bibliographies including prices and ordering information is available.

GIFTED CHILD SOCIETY, INC.

59 Glen Gray Road  
Oakland, NJ 07436  
(201) 337-7058

Contact: Gina Ginsberg

The Gifted Child Society, Inc. is one of the country's largest non-profit, parent-run organizations and offers an extensive, nationally respected "Saturday Workshop" for gifted and talented children. The Ford Foundation funded the society to write How to Help Your Gifted Child, a book on the joys and problems surrounding gifted children for teachers and parents.

MASSACHUSETTS ASSOCIATION FOR  
THE ADVANCEMENT OF INDIVIDUAL  
POTENTIAL

MA/AIP

P.O. Box 65  
Milton Village, MA 02187

MA/AIP serves as an advocacy group on behalf of gifted and talented students in Massachusetts. Approximately two hundred parents and educators comprise the membership.

MASSACHUSETTS DEPARTMENT OF EDUCATION

Bureau of Student Services  
31 St. James Avenue Room 531  
Boston, MA 02116  
(617) 727-5754

Contact: Roselyn Frank

The Bureau coordinates activities and disseminates information about programs and resources concerning the education of gifted and talented.

MERRIMACK EDUCATION CENTER (MEC)

101 Mill Road  
Chelmsford, MA 01824  
(617) 256-3985

Contact: Carol Mazuy

MEC provides a variety of services in gifted and talented education. Project Enterprise involves Bedford, Billerica, Tewksbury, Westford, and Wilmington in a project to screen, identify, and meet the needs of gifted students at low additional cost while increasing awareness of all teachers, parents, and community members. Community resources are identified and mentors serve as models for gifted students through a learning contract approach. In addition, the Information Services at MEC provide computer searches on gifted and talented education and a variety of curricular options from their Trends in Curriculum collection on microfiche.



## NATIONAL AND STATE ORGANIZATIONS (cont.)

### MERRIMACK EDUCATION CENTER (MEC) (cont.)

Finally, MEC has in the past offered inservice training, and courses in conjunction with Fitchburg State College on gifted and talented education.

MULTI-STATE CONSORTIUM FOR THE GIFTED  
Department of Public Instruction  
126 Langdon Street  
Madison, WI 53702  
Contact: Russell Mosely, Director  
(608) 266-2658

The Multi-State Consortium for the Gifted is a U.S. Office of Education funded group of six states which share ideas, programs, and materials. Each of the six states, (Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin) has an individual program, and requests for information should be directed to the particular state department of education.

NATIONAL ASSOCIATION FOR CREATIVE CHILDREN AND ADULTS  
8080 Springvalley Drive  
Cincinnati, OH 45236  
(513) 631-1777

The National Association for Creative Children and Adults is a non-profit agency founded in 1974. Services and activities of the association include creativity workshops, inservice teacher training, counseling, evaluation, a library, field term opportunities, conferences, programs, projects, and publications.

NATIONAL ASSOCIATION FOR GIFTED CHILDREN  
217 Gregory Drive  
Hot Springs, AR 71906  
(501) 767-6933

The National Association for Gifted Children was founded in 1954 and incorporated as a tax-exempt, non-profit association, devoted solely to advancing interest in, and programs for the gifted without regard to race, creed, color, or sex. The association publishes The Gifted Child Quarterly, holds a national convention once a year, assists in the formation of local groups, and answers general questions related to giftedness and creativity.

NATIONAL/STATE LEADERSHIP TRAINING INSTITUTE ON THE GIFTED AND TALENTED (N/S-LTI-G/T)  
Suite PH-C  
316 West Second Street  
Los Angeles, CA 90012  
Contact: Irving S. Sato, Director  
(213) 489-7470

Gifted and talented children are served through training institutes for their teachers, school administrators, and parents. N/S-LTI-G/T has developed seventeen publications on subjects varying from identification plans and programs, to evaluation. The monthly Bulletin gives national coverage to programs, research, materials, funding, and parent involvement. Contractual services for workshops and technical assistance are available through GREAT (Gifted Resources Education Action Team). National and regional institutes in program planning, curriculum development and special topics are planned throughout the year. Catalogs and brochures are available free of charge.



NATIONAL AND STATE ORGANIZATIONS (cont.)

NORTH CAROLINA ASSOCIATION FOR  
GIFTED AND TALENTED

221 Orchard Drive, No. 3  
Boone, NC 28607  
(704) 264-7133

The North Carolina Association for the Gifted and Talented (NCAGT) is a professional organization designed to help promote gifted education in North Carolina. The Association works closely with the State Department of Public Instruction and PAGE (Parent Association for Gifted Education), and publishes the NCAGT Quarterly Journal.

STUDY OF MATHEMATICALLY  
PRECOCIOUS YOUTH (SMPY)

Department of Psychology  
127 Ames Hall  
The John's Hopkins University  
Baltimore, MD 21218  
(301) 338-7087  
Contact: Julian C. Stanley, Director

A longitudinal Study of Mathematically Precocious Youth (SMPY) was initiated in 1971 to identify and track seventh and eighth grade students with superior ability in mathematics. Publications include Mathematical Talent: Discovery, Description, and Development, and The Gifted and the Creative: A Fifty-Year Perspective. Their Intellectually Talented Youth Bulletin (ITYB), is available on a subscription basis.

TALENTED AND GIFTED MAGNET  
INFORMATION CENTER

University of Massachusetts/Harbor Campus  
Boston, MA 02125  
Contact: Sandi Lawler  
(617) 287-1900 x2381

The Project TAG/MAGNET Information Center helps identify and interrelate existing gifted and talented programs in the state of Massachusetts and shares information on conferences and materials of interest to leaders of talented and gifted.

U.S. OFFICE OF EDUCATION  
THE OFFICE OF GIFTED AND TALENTED

Donohue Building, Room 3835  
400 Maryland Avenue, S.W.  
Washington, DC 20202  
(202) 245-2482

The Office of Gifted and Talented within the United States Office of Education was established by the Report to Congress on the Education of Gifted and Talented in March, 1972. Its primary responsibility is to coordinate all national activities on behalf of gifted and talented populations. In addition to providing information, the office administers federal funding for gifted and talented programs.

The following organizations did not respond to our survey in time to be included with a description of their services, but may also be a valuable resource to educators and parents:

THE ASSOCIATION FOR THE GIFTED,  
COUNCIL OF EXCEPTIONAL CHILDREN  
1920 Association Drive  
Reston, VA 22091  
(202) 620-3660 or (800) 336-3728

GIFTED CHILD RESEARCH INSTITUTE  
300 West 55th Street  
New York, NY 10001  
(212) 541-7059

COUNCIL OF STATE DIRECTORS OF  
PROGRAMS FOR THE GIFTED  
c/o Florida State Dept. of Education  
319 Knott Building  
Tallahassee, FL 32304  
(904) 599-5807

NORTHEAST EXCHANGE  
Education Improvement Center  
N.J. Department of Education  
RD 4, Box 209  
Sewell, NJ 08080  
(609) 228-6000  
Contacts: Theodore J. Gourley  
James Albino

CREATIVE EDUCATION FOUNDATION, INC.  
State University College at Buffalo  
Chase Hall  
1300 Elmwood Avenue  
Buffalo, NY 14222  
(716) 878-4000

PARENTS FOR THE ADVANCEMENT OF  
GIFTED EDUCATION  
5015 Glenwood Avenue  
Raleigh, NC 27612  
(919) 737-2516  
Contact: Leroy Martin, State Coord

EXPLORERS' CLUB  
46 East 70th Street  
New York, NY 10021  
(212) 628-8383

# AUDIOVISUAL MATERIALS

## FILMS ON GIFTED AND TALENTED STUDENTS

<u>SOURCE</u>	<u>TITLE</u>	<u>COSTS</u>
Audiovisual Service Ventura County Supt. of Schools County Office Building 535 East Main Street Ventura, California 93009	<u>WHO IS THE GIFTED CHILD?</u> (filmstrip)	Rental Not Avail. Purchase \$20.00
Broadcasting and Film Commission c/o National Council of Churches 475 Riverside Drive New York, NY 10027	<u>SIT DOWN, SHUT UP, OR GET OUT</u>	Rental Not Avail. Purchase \$500.00
Boston University Film Library School of Education 765 Commonwealth Avenue Boston, MA 02215 (617) 353-3272 or 353-3278	<u>GIFTED ONES</u> (22 min., 1960)	Rental \$5.75
	<u>PROVIDING FOR INDEPENDENCE</u> <u>IN LEARNING</u> (30 min., 1968)	Rental \$7.80
	<u>THE GIFTED CHILD</u> (29 min., 1959)	Rental \$7.80
Churchill Films 662 No. Robertson Boulevard Los Angeles, California 90069	<u>UNDERSTANDING THE GIFTED</u>	Rental \$40.00* Purchase \$240.00
Iowa State Education Association 4025 Tonawanda Drive Des Moines, Iowa 50312	<u>CHILDREN OF PROMISE</u>	Rental Not Avail. Purchase \$225.00
Pyramid Films Box 1048 Santa Monica, California 90406 Available free from the Worcester Public Library Film Department (617) 752-3751	<u>WHY MAN CREATES?</u>	Rental \$20.00* Purchase \$300.00
Scott Anderson Productions Heron House Reston, Virginia 22090	<u>WHO ARE THESE PEOPLE?</u>	Rental \$25.00* \$75.00** Purchase \$300.00 (No free preview- rental deducted from purchase price)

\* Daily rental fee  
\*\* Weekly rental fee



# FILMS ON CULTURALLY DIFFERENT GIFTED CHILDREN

<u>SOURCE</u>	<u>TITLE</u>	<u>COSTS</u>
Audiovisual Services Ventura County Superintendent of Schools County Office Building 535 East Main Street Ventura, California 93009	<u>MORE THAN A GLANCE</u>	Rental \$20.00** Purchase Not Avail.
National Education Association 1201 16th Street, N.W. Washington, D.C. 20202 or Boston University Film Library School of Education 765 Commonwealth Avenue Boston, MA 02215 (617) 353-3272 or 353-3278	<u>RAFE - DEVELOPING GIFTEDNESS IN THE EDUCATIONALLY DISADVANTAGED</u>	Rental \$20.00* Purchase \$200.00  Rental \$5.75

## FILM ON THE HANDICAPPED GIFTED CHILD

Centron Educational Films 1621 West Ninth Street Lawrence, Kansas 66044	<u>LEO BUERMAN</u>	Rental Not Avail. Purchase \$190.00
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\*Daily Rental Fee  
\*\*Weekly Rental Fee

## **ANNOTATED BIBLIOGRAPHY**

## GENERAL

A Guide to Programs Funded by the Office of Gifted and Talented. Reston, VA: Council for Exceptional Children, 1978.  
National programs that have been funded.

Barbe, W.B., and Renzulli, J.S., eds. Psychology and Education of the Gifted. 2nd edition, New York: Irving Publishers, 1975.  
A collection of outstanding articles and literature in the field of giftedness.

Barton, Paul; Covedon, Joelcira; Judkins, Paul; Olivero, James; Parnes, Sidney; Ruiz, Mary; Treloar, Donald. A New Generation of Leadership Education for the Gifted and Talented. Ventura, CA: Ventura County Superintendent of Schools.  
This book is a compilation of readings on leadership.

Bloom, Benjamin S., et al. Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. New York: David McKay Company, 1956.  
Bloom's Taxonomy is a cognitive model based on higher level thinking skills.

Boston, Bruce O. ed. A Resource Manual of Information on Educating the Gifted and Talented. Reston, VA: The Council for Exceptional Children, 1975.  
A compilation of federal, state and national resources on gifted education.

Bridges, Sydney. Problems of the Gifted Child: IQ-150. London: Priory Press, 1973.  
A practical handbook of the problems of the highly gifted which are often pertinent to all gifted children.

Burt, Cyril. The Gifted Child. New York: Holsted, 1975.  
An historical introduction to giftedness, a commentary on educational and philosophical concepts, and the implications of inherited intelligence are contained in this book.

Crow, L.D., and Crow, A., eds. Educating the Academically Able: A Book of Readings. New York: McKay Company, 1963.  
A book of readings on the basic principles and practices in the education of the gifted.

DeHaan, Robert F., and Havighurst, Robert J. Educating Gifted Children (2nd ed.) Chicago: University of Chicago Press, 1961.  
This book presents the problems of educating the gifted, an analysis of community factors and home influences.

Fortna, Richard O., and Boston, Bruce O. Testing the Gifted Child: An Interpretation in Lay Language. Reston, VA: The Council for Exceptional Children, 1976.  
This book contains basic information about instruments used in the identification and screening process in gifted and talented education.

Freehill, Maurice F. Gifted Children: Their Psychology and Education. New York: The Macmillan Company, 1961.  
This book contains fifteen chapters dealing with maximizing intellectual talent.



GENERAL (Cont.)

French, Joseph L., ed. Educating the Gifted: A Book of Readings. rev. ed. New York: Holt, Rinehart & Winston, Inc., 1964.

A comprehensive survey of the literature in the field of gifted covering many areas inherent in the education of the gifted.

Gallagher, James J. Teaching the Gifted Child, Second Edition. Boston: Allyn and Bacon, 1975.

This book contains many aspects of gifted education with primary consideration on curriculum and pedagogy.

Gold, Milton J. Education of the Intellectually Gifted. Columbus, Ohio: Charles E. Merrill Books, Inc., 1965.

This book studies the relationship of theoretical research and practical situations to problems in gifted education.

Gowan, John C.; Demos, George E.; Kokaska, J. The Guidance of Exceptional Children. New York: McKay, 1972.

A book of readings on guidance of exceptional children with chapters on the gifted and the creative.

Gowan, John C., and Torrance, E. Paul, eds. Educating the Ablest: A Book of Readings on the Education of Gifted Children. Itasca, Illinois: F.E. Peacock Publishers, Inc., 1971.

A book of articles on current trends in gifted education.

Guilford, J.P. The Nature of Human Intelligence. New York: McGraw-Hill, 1967.

A theoretical model of the factors of intelligence forming one basis for developing creative programming for gifted and talented students.

Kaplan, Sandra. Providing Programs for the Gifted and Talented: A Handbook. Office of the Ventura County Superintendent of Schools, Ventura, CA: 1974.

A handbook of appropriate program practices for gifted and talented children.

Laubenfels, Jean M. The Gifted Student - An Annotated Bibliography. Westport, CT. Greenwood Press, Inc.

This annotated bibliography covers the most recent literature about gifted and talented children including general introductory material, causal factors, characteristics of the gifted, identification techniques, programming for the gifted, special problems of the gifted, longitudinal studies, and related research. There are also appendices which list resource personnel, organizations, tests, audiovisual materials, and media aids.

Martinson, Ruth A. The Identification of the Gifted and Talented. Ventura, CA: Office of the Ventura Superintendent of Schools, 1973.

This book presents a rationale for the identification of gifted and talented children with appropriate identification procedures.

Martinson, Ruth A., and Seagoe, May V. The Abilities of Young Children. Washington, DC: The Council for Exceptional Children, 1967.

A book assessing gifted children and comparing the relationship between intelligence and creativity.

## GENERAL (Cont.)

Renzulli, Joseph S. A Guidebook for Evaluating Programs for the Gifted and Talented. Ventura, CA: Office of Ventura Superintendent of Schools, 1975.

This book contains evaluation concepts and designs for gifted and talented programs.

Stanley, Julian, et al. Mathematical Talent: Discovery, Description and Development. Baltimore: Johns Hopkins University Press, 1974.

This book explains the (SMPY) Study of Mathematically Precocious Youth, a five-year project at Johns Hopkins University.

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A practical handbook for school administrators translating theory into practice.

Terman, Lewis M., and Oden, Melita. The Gifted Child Grows Up. Genetic Studies of Genius. Stanford, CA: Stanford University Press, 1947.

Vol. 1: Mental and Physical Traits of a Thousand Gifted Children, by L.M. Terman, assisted by B.T. Baldwin; Edith Bronson; and others, 1925.

Vol. 2: The Early Mental Traits of Three Hundred Geniuses, by Catherine M. Cox, assisted by Lela O. Gillan; Ruth H. Livesay; and L.M. Terman, 1926.

Vol. 3: The Promise of Youth, by Barbara S. Burke, Dortha W. Jensen, and L.M. Terman, 1930.

Vol. 4: The Gifted Child Grows Up, by L.M. Terman, and Melita H. Oden, 1959.

Vol. 5: The Gifted Group at Mid-Life, by L.M. Terman, and Melita H. Oden, 1960.

An in depth longitudinal study of the gifted from childhood through adult life.

Torrance, E. Paul. Gifted Children in the Classroom. New York: MacMillan and Company, 1965.

This book covers information on the nature of giftedness, the goals of educating the gifted, problems of identification and motivation, and the development of giftedness during the preschool years.

Treffinger, Donald J., and Curl, Clifford. Self-Directed Study Guide on the Education of the Gifted and Talented. Ventura, CA: Office of Ventura Superintendent of Schools, 1976.

A handbook for organizing and directing learning experiences for gifted and talented children.

Witty, Paul A. ed. Reading for the Gifted and Creative Student. Newark, Delaware: International Reading Association, 1971.

This book discusses gifted and talented education and suggests appropriate programming, guidance and innovative experiences.



## PARENTS

Coffrey, Kay, et al. Parents Speak on Gifted and Talented Children.

Ventura, CA: Ventura County Superintendent of Schools Office, 1976.  
This publication for parents by parents of gifted and talented children covers a range of topics from organizational planning, to practical hints, enrichment ideas and resource suggestions.

Delp, Jeanne L., and Martinson, Ruth A. A Handbook for Parents of Gifted and Talented (Also Helpful for Educators). Ventura, CA: Ventura County Superintendent of Schools, 1975.

This handbook covers identification, characteristics, case studies, ways parents can organize, and other related topics.

Ginsberg, A. Is Your Child Gifted? New York: Simon & Schuster, 1976.  
Lists characteristics of gifted and explains how parents can identify giftedness.

Ginsberg, Gina, and Harrison, Charles H. How to Help Your Gifted Child: A Handbook for Parents and Teachers. New York: Monarch Press, 1977.  
A practical handbook for parents and teachers of the gifted covers such topics as building an effective parents organization and planning a program for the gifted.

Kanigher, Herbert. Everyday Enrichment for Gifted Children at Home and School. Ventura, CA: Ventura County Superintendent of Schools, 1977.  
Enrichment ideas for parents and teachers in art, geography, language, mathematics, music, and science.

Kaufman, Felice. Your Gifted Child and You. Reston, VA: The Council for Exceptional Children, 1976.  
A parents' practical handbook on the gifted child. It includes characteristics of gifted, suggestions to foster creativity, motivational ideas, and useful ways to promote programming for gifted.

Khatena, Joe. The Creatively Gifted Child: Suggestions for Parents and Teachers. New York: Vantage Press, Inc., 1978.  
This book is a guide to recognizing and identifying creatively gifted children and then developing stimulating activities to challenge their potential.

Maynard, Fredelle. Guiding Your Child to a More Creative Life. New York: Doubleday, 1973.  
A useful guide to develop family activities and materials to cultivate creativity.

Strang, Ruth. Helping Your Gifted Child. New York: E.P. Dutton, 1967.  
An informative guide for parents dealing with the varieties of giftedness and suggesting opportunities for gifted children at all ages.

## CREATIVITY

Adams, James L. Conceptual Blockbusting: A Guide to Better Ideas. San Francisco: W.H. Freeman and Company, 1974.  
Practical book to begin to change perceptions, attitudes, concepts and look at problem solving in a new way.



- Biondi, Angelo M. The Creative Process. Great Neck, New York: Synergetic Assn., 1972.  
A book explaining the creative problem solving process covering mental and emotional blocks, ways to nurture creativity, incubating and brainstorming ideas and creative evaluation.
- DiBono, E. Lateral Thinking: Creativity Step by Step. New York: Harper and Row, 1972.  
A book of techniques and exercises to develop the mind's creative skills.
- Feldhusen, John F. and Treffinger, Donald J. Teaching Creative Thinking and Problem Solving. Dubuque, Iowa: Kendall-Hunt Publishing Company, 1976.  
This book uses Guilford's model to teach creative thinking and problem solving.
- Getzels, Jacob W. and Phillip W. Jackson. Creativity and Intelligence: Explorations with Gifted Students. New York: John Wiley and Sons, 1962.  
This book explores the relationship between intelligence and creativity.
- Gowan, J.C. Development of the Creative Individual. San Diego, California: Robert Knapp Publishers, 1972.  
The developmental stages, that deal with the many aspects of creativity.
- Parnes, Sidney J. and Harding, Harold F., eds. A Source Book for Creative Thinking. New York: Charles Scribner's Sons, 1962.  
A collection of 29 articles and speeches on creative education, the creative process, problem solving, and case studies.
- Parnes, S.J. Creative Behavior Guidebook. New York: Scribner, 1967.  
A guidebook to development of creative behaviors.
- Parnes, S.; Noller, Ruth; and Biondi, A. Guide to Creative Action (rev. ed. New York: Charles Scribner's Sons, 1977).  
A mini-encyclopedia of the development of creativity listing instructional programs, readings, and resources.
- Rothenberg, Albert, and Hausman, Carl. The Creativity Question. Durham, NC: Duke University Press, College Station, 1975.  
A book of readings addressing 3 areas of creativity, descriptive, explanatory and alternative approaches.
- Stanley, Julian C.; George, William C.; and Solano, Cecilia H., eds. The Gifted and the Creative: A Fifty Year Perspective 1925-1975. Baltimore: The Johns Hopkins University Press, 1978.  
A book of readings on the gifted movement, studies at Johns Hopkins, three approaches to creativity and professionals' views relating to giftedness.
- Torrance, Paul, and Myers, R.E. Creative Learning and Teaching. New York: Dodd Mead, 1973.  
A book to help teachers become more aware of creative potentialities, creative learning processes, the wealth of existent talent, and enhancing creative functioning.

## CURRICULUM

Baldwin, Alexinia, and Wooster, Judith. Baldwin Identification Matrix Inservice Kit for the Identification of G/T Students. Buffalo, NY: Disseminators of Knowledge, 1977.

A systematic matrix to identifying gifted and talented students when using multi-criteria approaches.

Birch, Jack W., and McWilliams, Earl M. Challenging Gifted Children. 1955. A book to help teachers in the regular classroom provide appropriate educational opportunities for gifted and talented children at all levels.

Boston, Bruce O., ed. Gifted and Talented: Developing Elementary and Secondary School Programs. Reston, VA: ERIC Clearinghouse on Handicapped and Gifted Children, 1975.

Articles on the many topic areas of gifted including starting a program, and instructional planning.

Elementary Teacher's Guide to Free Curriculum Materials. Randolph, Wisconsin: Educators Progress Service, Inc., 1975.

This book lists places and ideas for getting free and useful materials for the classroom.

Fliegler, Louis A. ed. Curriculum Planning for the Gifted. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1961.

A resource manual for curriculum planning for teachers, administrators, and curriculum specialists.

Horn, Robert E., ed. The Guide to Simulations/Games for Education and Training. (3rd ed.) Cranford, New Jersey: Didactic Systems, Inc., 1977. Vol. I and Vol. II.

Excellent guide to games and simulations, including references from most subject areas.

Kaplan, Sandra N., et al. A Young Child Experiences. Pacific Palisades, California: Goodyear Publishing Company, Inc., 1976.

Activities for the young gifted child with suggestions for organizing a creative classroom environment.

Kaplan, Sandra. Change for Children. Pacific Palisades, California: Goodyear Publishing Company, Inc., 1973.

Ideas and activities to promote individualized learning for children.

Kaplan, Sandra. The Big Book of Collections: Math Games and Activities. Pacific Palisades, California: Goodyear Publishing Company, Inc., 1975.

Games, activities and worksheets to reinforce various skills in the primary grades.

Kaplan, Sandra, and Madsen, Sheila K. Think-Ins: An Approach to Relevant Curriculum Stressing Creative Thinking and Problem Solving. Monterey Park, California: Creative Teaching Press, 1974.

These activities challenge students to think creatively.

Martinson, Ruth A. Curriculum Enrichment for the Gifted in the Primary Grades. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968.

A book of practical curriculum ideas for gifted children in the primary grades.



Meeker, Mary. A Beginner's Reader About Guilford's Structure of the Intellect. Columbus, Ohio: Charles E. Merrill, 1969.  
An introduction and explanation of Guilford's Structure of the Intellect.

Meyers, R.E., and Torrance, E. Paul. Can You Imagine? Boston: Ginn and Company, 1965.

Creative activities to stimulate thinking skills of fluency, flexibility, elaboration, and originality.

Renzulli, Joseph S. The Enrichment Triad Model: A Guide for Developing Defensible Programs for the Gifted and Talented. Wethersfield, CT: Creative Learning Press, 1977.

This book provides a rationale and a guide to developing a qualitatively different enrichment program for gifted and talented children.

Renzulli, Joseph S. New Directions in Creativity: Mark I, II, and III. New York: Harper and Row, 1973.

Worksheets of creative activities built on Guilford's Structure of the Intellect model.

Renzulli, Smith, White, Callahan, and Hartman. Scales for Rating the Behavioral Characteristics of Superior Students. Wethersfield, CT: Creative Learning Press, 1977.

Structured teacher nomination scales on learning, motivation, creativity, leadership, artistic ability, and musical ability.

Sanders, Norris M. Classroom Question, What Kinds? New York: Harper and Row Publishers, 1966.

Questioning techniques for activities and discussions that are based on Benjamin Bloom's Taxonomy.

Smith, Linda Harris, et al. New Directions in Creativity, Mark A and B. New York: Harper and Row, 1976.

Workbook activities to encourage creativity in the language arts area.

Stewart, E.D., and Howard, M.R. The Almost Whole Earth Catalogue of Process Oriented Enrichment Activities. Wethersfield, CT: Creative Learning Press, 1977.

Many "how to" enrichment activities.

Wurman, R.S. Yellow Pages of Learning Resources: Objectives, Principles and Curricula for Programs in the Education of Mentally Gifted Minors... Kindergarten Through Grade Twelve. Cambridge: M.I.T. Press, 1972.

A complete source of community learning resources.

NOTE: An additional curriculum bibliography is available from Project PRISM, 37 West Main Street, Norton, Massachusetts 02766, (617) 285-3718.



NOTES

NOTES

For more information, contact the Massachusetts Dissemination Project or one of the Regional Education Centers listed below:

Charles Radlo  
Central Massachusetts Regional Center  
Beaman Street, Route 140  
West Boylston, MA 01583 (617) 835-6267

Paul Francis  
Southeast Regional Center  
Lakeville State Hospital  
P.O. Box 29  
Lakeville, MA 02346 (617) 947-3240

Don Geer  
Pittsfield Regional Center  
188 South Street  
Pittsfield, MA 01201 (413) 499-0745

Maria Grasso  
Northeast Regional Center  
Danvers State Hospital  
Harrington Building  
Gregory Street  
Middleton, MA 01949 (617) 777-3500, 3501, 3502

Barbara Ramsdell  
Greater Boston Regional Center  
54 Rindge Avenue Extension  
Cambridge, MA 02140 (617) 547-7472

Carol Doss  
Springfield Regional Center  
155 Maple Street  
Springfield, MA 01105 (413) 739-7271



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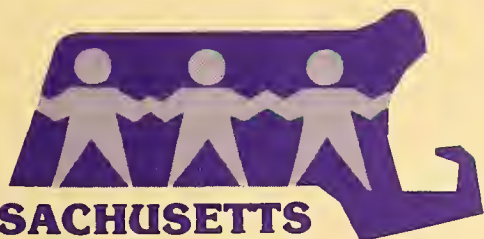
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# RESOURCES FOR SCHOOLS

MASSACHUSETTS  
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## 11. NEW DIRECTIONS IN GUIDANCE AND COUNSELING SERVICES IN MASSACHUSETTS



MASSACHUSETTS  
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# 11. NEW DIRECTIONS IN GUIDANCE AND COUNSELING SERVICES IN MASSACHUSETTS

DEVELOPED AND PUBLISHED JOINTLY BY:

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Resources for Schools is a series of publications developed by the Massachusetts Dissemination Project (MDP) for Massachusetts educators, parents, and students. The project, funded by the National Institute of Education, has four major goals:

- to stimulate greater awareness of the resources available to Massachusetts schools;
- to provide educators, parents, and students with specific information about resources and materials for school programs and services;
- to assist regional education centers and the Department to increase and improve information and dissemination services to educators, parents, and students in the state;
- to encourage greater exchange and sharing of resources among educational organizations, service providers, the Department of Education and its regional education centers, and school personnel.

The project is located in the Department's Boston office. In addition, each regional center has designated a staff member who maintains continuous contact and involvement with project activities across the state, and is responsible for working with center staff to improve information and dissemination services in the center. Ultimately, the regional centers will function as switchboards -- sometimes providing services directly to schools, other times connecting them with the many existing resources. The development of this series -- as its name suggests -- is one way the project is helping make these connections. *Please contact a member of the project staff for more information about the series, the project, or the regional center nearest you.*

Resources for Schools presently available:

1. A Catalog of Publications from the Massachusetts Department of Education (being revised)
2. Video Tapes for Teaching (being revised)
3. A Guide to Dissemination Agencies (being reprinted)
4. Community Involvement in Your School: A Guide to People, Programs and Publications
5. The Student's Guide to Special Education (being reprinted)
6. Implementing Chapter 622: Exemplary Programs for Alleviating Racism and Sexism in Massachusetts Schools
7. Competency Programs for Basic Skills Improvement: A Resource Guide
8. A Review of Massachusetts Statewide Assessment Findings: A Curriculum Interpretation of the Major Findings of the Massachusetts Statewide Assessment Program
9. Resources for Training Educators of Children with Special Needs
10. A Resource Guide for the Education of Gifted and Talented Students

Resources for Schools topics to look for in the future:

- |                                       |                                      |
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| • Related Educational Agencies        | • Community Education                |

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# INTRODUCTION

In June 1978, the Massachusetts Board of Education adopted a position paper on guidance and counseling services in the state. The Board emphasized that guidance and counseling must be given higher priority in Massachusetts schools if students are to fulfill their individual educational potential. The paper categorized guidance and counseling services into five functions: personal counseling, career and educational counseling, appraisal, referral, and consultation. It stressed that services should begin at the elementary level and continue through to high school. Guidance and counseling services should:

- °help students increase their ability to make personal, social, career, and educational decisions;
- °help parents acquire skills necessary to help their children make educational and career decisions;
- °help students and parents broaden their perceptions of students' career and educational choices;
- °help students better understand themselves and their relationships to others;
- °help students, parents, and school personnel deal with problems within the school environment which may impair student functioning in school.

Furthermore, the Board stated that guidance and counseling services should take the lead in eliminating sex role stereotyping and racial or ethnic bias. Equally important, services should involve parents, all members of the school community, and community resources.

This handbook, one of the Massachusetts Dissemination Project's Resources for Schools series, is a sampling of those guidance and counseling programs currently operating in Massachusetts schools which clearly exemplify the concepts and principles of the position paper. It is designed as a practical tool for guidance personnel, teachers, administrators, and other school personnel who are concerned about strengthening guidance and counseling services in their school. The handbook is not intended to prescribe programs, but to provide school personnel with a variety of suggestions and ideas for program development. It is not intended to be a status report on guidance and counseling programs and services in the state, but is one way of sharing program information across school district lines and across the state. Individuals or groups may want to use these programs in their present form, or may wish to adapt them to their own style or circumstance.

As a companion piece to the Board's position paper, the handbook is organized according to the five functions of guidance and counseling services, and by grade level. The appendix includes summary charts listing all the programs in the handbook according to function with a capsule description. Wherever appropriate, programs are listed under more than one function.

Programs included were submitted by individuals from school districts throughout the Commonwealth. Requests for information about programs that reflected the five functions of guidance and counseling services were sent to members of the ad hoc committee that developed the position paper, the Massachusetts School Counselors Association, the regional education councils throughout the state, and individual school districts.

Programs included in the handbook did not undergo formal evaluation or validation but were selected because they provide examples of practices that promote implementation of the position paper. Considerable efforts were made to ensure that programs did in fact reflect the goals, objectives, functions, and qualities highlighted in the position paper. This was done through follow-up phone calls, on-site visits, a selection process and finally, a review by an ad hoc committee composed of guidance counselors, teachers, principals, superintendents, and members of the Department of Education's regional education councils.

Several programs included in the handbook do not directly involve the school counselor and are not offered through the guidance department. These programs are included because they illustrate how counseling can be a shared responsibility of the school community. However, the Board states in the position paper that while counseling services should be shared, they should be coordinated by the counseling staff under the direction of the school administration. Therefore, when adopting counseling programs which occur in the classroom, or programs which are conducted by school personnel other than school counselors, schools are urged to do so under the guidance of, and in cooperation with, the school guidance and counseling department.

We recognize the fact that many outstanding and innovative programs which exist in the schools are not included in this resource guide. Therefore, in an effort to keep this handbook up to date, and to include programs overlooked in the initial search for promising practices in guidance and counseling, an addendum to this handbook will be developed.\*

We gratefully acknowledge the assistance of the many school districts, cities, towns, and professional associations that contributed in any way to make this handbook possible. Also, we wish to thank Rona Shuman Kiley for her diligence in the promotion of the position paper and for her initial efforts in collecting programs throughout the Commonwealth.

The Bureau of Student Services was designated by the Board of Education to be the center for leadership of guidance and counseling services in the Department of Education. Additional thanks are extended to Joan Schuman, Director of the Bureau of Student Services; Maxine Minkoff, Coordinator of Guidance and Counseling, under whose auspices this handbook was developed; Cecilia M. DiBella, Director, and Elizabeth J. Maillett, Publication Coordinator, of the Massachusetts Dissemination Project through whom this handbook was edited, published, and distributed; and Ruth Santer and Janis DiStefano who provided technical assistance in design and clerical service.

Iris Crawford Danforth  
Susan Freedman  
Kathleen Peters

Spring 1979

\* School personnel and other interested parties are encouraged to send information about such programs to Maxine Minkoff, Department of Education, Bureau of Student Services, 31 St. James Avenue, Boston, Massachusetts, 02116.



# PERSONAL COUNSELING

Through personal counseling, students should be helped to work out both personal and social problems affecting their educational opportunities. Personal counseling should be offered to students in two ways: a formal system and a spontaneous informal manner. To be effective the counselor must establish relationships built on trust and understanding with students as individuals in order to help them develop a positive self-image and decision-making skills.

Personal counseling should promote positive relationships between students, parents, and teachers to resolve problems which can affect learning. The counselor should give full consideration and fair treatment to all parties -- the student, the parents, and the teacher to resolve such problems.

Personal counseling is often used in response to deteriorating personal problems or classroom difficulties. Thus, it is often viewed as crisis-oriented and reactive in nature. However, personal counseling should also be preventive. Counselors can assist teachers and administrators to recognize certain behavioral signs so that assistance can be given to students before problems emerge.

Personal counseling should also help students anticipate and address the stresses of adolescence through programs such as the prevention and treatment of alcohol and drug abuse. Dropout prevention programs are another example of the personal counseling function. Finally, confidentiality between student and counselor must be respected and protected in order for personal counseling to be truly responsive to student's needs.

Several types of personal counseling programs are now operating in Massachusetts schools. Programs included in this handbook address the needs of elementary school children in adjusting to new situations. Wildwood School, Amherst, focuses on adjustment to a new school, while McCarthy-Towne School, Acton, concentrates on changing family situations such as parental separation. Harrington School, Cambridge, addresses the special adjustment needs of the bilingual students. Another type of personal counseling is offered in Newton Elementary Schools in a course that helps sixth graders anticipate and deal with adolescence. A unique Outward Bound program at Bowman School, Lexington, helps students work together more effectively in an outdoor environment.

High school personal counseling programs concentrate on the myriad of social and mental health problems and pressures facing contemporary youth. One such program is the Contemporary Life Awareness Series at Nashoba Regional High School, Bolton. In addition, the CASPAR Alcohol Education Program, Somerville, utilizes a variety of intervention strategies with students, teachers, and community residents to reduce alcohol-related problems for students at all grade levels.

Personal Counseling: Elementary through High School

TITLE: CASPAR Alcohol Education Program  
LOCATION: Somerville, Massachusetts 02143  
CONTACT PERSON: Dixie Mills, (617) 623-2080

#### OBJECTIVES:

1. To prevent and reduce alcohol-related problems in young people by encouraging responsible decision-making.
2. To train teachers to develop and implement an effective alcohol curriculum in grades three through twelve.
3. To train high school students as peer leaders in alcohol education.
4. To increase community awareness of alcohol issues.
5. To consult with individuals and agencies on alcohol prevention, intervention, resources, and referral techniques.

#### DESCRIPTION:

The CASPAR Alcohol Education Program is a community-based project which addresses issues related to youth and alcohol. Its primary concern is raising the consciousness of the general public about alcohol-related issues. Under the direction of a steering committee comprised of parents, school personnel, youth, human service agency staff, and representatives from the police, Alcoholics Anonymous, and Al-Anon, numerous school and community activities have been undertaken. These include plays, cable television shows, and programs on alcohol and drug abuse.

A major focus of CASPAR is training public school personnel to teach students a responsible decision-making approach to the use of alcohol. The CASPAR staff has thus far trained over one hundred Somerville teachers, librarians, school nurses, and counselors in techniques for providing alcohol education to students. Several of these teachers, with the assistance of the CASPAR staff, have developed an alcohol education curriculum with sequential modules for grades three through twelve.

High school students are also involved in CASPAR through a peer leader program. Trained as educators, peer leaders provide alcohol education activities to a wide variety of groups. For example, they offer puppet skits to children in classrooms and summer day camps, assist teachers in developing alcohol education units, provide alcohol information and resources to peers, and represent the concerns of youth to adults such as parents, police, and health professionals. They also run group sessions for their peers to discuss problems relating to alcohol use and abuse, and sessions for younger children who have alcoholism in their families.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Gain support from the community, school committee, school administration and staff to initiate an alcohol education program.
2. Organize a broad-based steering committee consisting of community members and school personnel.
3. Contact a community agency working in the area of alcohol education and together, develop an in-school alcohol education program.
4. Select a program coordinator from either the agency or school personnel.
5. Provide inservice training time for teachers.
6. Train teachers on alcohol education and with them, develop a curriculum or research and review existing curriculum.
7. Identify high school students for a peer component.
8. Train high school students.

#### MATERIALS AND EQUIPMENT:

##### Curriculum

"Decisions About Drinking" teachers' guides, resource materials, and lesson plans, grades three through twelve

"Mike and Tom" comic book by Charles Deutsch

##### Sound and slide presentation

"CASPAR: The Somerville Experience"

Resource material  
"Alcohol Education in the Classroom Evaluation Report"

All materials are available through CASPAR,  
226 Highland Avenue, Somerville, Massachusetts 02143

Slide projector and screen

Tape recorder

COST:

Curriculum and Teachers Guide	
Grades three through twelve	\$40.00
Grades three through six	18.95
Grades seven through nine	18.95
Grades ten through twelve	18.95
Comic book (per copy)	.65
Evaluation Report	
Full Report	27.50
Summary	4.00
Sound and Slide Presentation	115.00
Rental	25.00

Personal Counseling: Elementary

TITLE: Bilingual Course  
LOCATION: Harrington Elementary School, Cambridge, Massachusetts 02141  
CONTACT PERSON: Helen Goldstein, (617) 492-8000  
X 289

OBJECTIVES:

1. To help newly immigrated Portuguese students adjust to a new country, culture, and school.
2. To increase students' skills in areas of listening, problem solving, and group discussion.
3. To assist teachers in increasing their effectiveness in working with bilingual students.

DESCRIPTION:

Through a combination of weekly classroom meetings and individual conferences, the guidance counselor helps 185 youngsters, grades kindergarten through eight, who have recently immigrated from Portugal to cope with the problems commonly experienced by students in a new culture. Classroom meetings focus on comparing and contrasting the Portuguese and American cultures, adjusting to a new home and environment, coping with the problems of learning a new language, making new friends, and understanding different physical and emotional stages of development.

These sessions are based on Glasser's Reality Therapy which encourages students to accept responsibility for their actions, rather than dwell on past failures, and to anticipate and plan the future based on the realities of the past and present. The counselor communicates with the students in Portuguese if they have not yet mastered English.

The counselor also offers workshops for teachers to help them increase their classroom effectiveness with respect to bilingual students and provides support to parents to help them get acclimated to the United States.

SUGGESTIONS FOR IMPLEMENTATION:

1. Obtain a developmental history from the parents of each participating student.



2. Conduct a classroom meeting in the bilingual classes once a week for a semester.
3. Train teachers how to apply Glasser's Reality Therapy to the classroom.
4. Keep parents informed about their child's adjustment in school.
5. Provide continuous feedback and support to both students and their teachers.

#### MATERIALS AND EQUIPMENT:

##### Texts

Glasser, William. Schools Without Failure  
New York, New York: Harper and Rowe, 1969.

Simon, Sidney. Meeting Yourself Halfway  
Niles, Ill.: Argus Communications, 1974.

Simon, Sidney; Howe, Leland; and Kirschenbaum, Howard. Values Clarification. New York, New York: Hart Pub. Co. 1972.

##### Filmstrips

Career education and moral education filmstrips.

Available through Guidance Associates,  
755 Third Avenue, New York, New York 10017.

##### Involvement Kits

Self development and career resource kits.  
Available through Science Research Associates, 155 N. Wacker Dr., Chicago, Ill. 60606.

Film projector and screen

#### COST:

Texts	\$ 20
Filmstrips	200
Involvement Kits	150

Personal Counseling: Elementary

TITLE: Group Counseling for Children from Split Families
LOCATION: McCarthy-Towne School, Acton, Massachusetts, 01720
CONTACT PERSON: Karen Walker, (617) 263-4982

#### OBJECTIVE:

1. To provide support for children whose parents are separating by helping the children to:
  - (a) begin to identify and express feelings regarding separation and divorce,
  - (b) begin to accept their feelings about separation and divorce,
  - (c) understand and cope with the expectations of other family members.

#### DESCRIPTION:

The guidance counselor from McCarthy-Towne School leads group counseling sessions for fourth, fifth, and sixth grade children from split families. These sessions meet for a twelve week period. The themes to be discussed at each session are generated by the students. Role playing, psycho-drama, and drawing activities are used to elicit the material for discussion. Some of the topics covered during the group experiences include: feeling responsible for causing the parental separation, fear of losing one parent or both, coping with increased emotional responsibility for one or both parents, and establishing a relationship with a step-parent. The counselor follows up these sessions by consulting with parents and by providing individual counseling or another group experience to children who are still unable to deal with separation and divorce issues. Referrals to community agencies are made for families who desire long-term or intensive counseling.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Distribute a memorandum to teachers about the group.
2. Inform parents about the group through articles in the parents' newsletter.
3. Obtain teacher and parent referrals for group membership.

4. Design get acquainted, fantasy, and role play activities around individual student concerns.
5. Maintain continuous contact with parents.
6. Confer with parents at the conclusion of the group sessions.
7. If necessary, continue meeting with the parents, or if they desire, refer them to an outside agency.
8. Provide individual counseling or another group experience for children, where necessary.

#### MATERIALS AND EQUIPMENT:

Paper

Hand-made animal family puppets

Crayons

Paint

#### COST:

None

#### Personal Counseling: Elementary

TITLE: Growing and Changing

LOCATION: Newton Elementary Schools, Newton,  
Massachusetts 02160

CONTACT PERSON: Gloria Wittes, (617) 552-7667

#### OBJECTIVES:

1. To help sixth graders anticipate the tasks and challenges of adolescence and junior high school.
2. To help students expand their self-awareness.

#### DESCRIPTION:

Growing and Changing is a curriculum designed to help sixth grade students dispel myths about the junior high experience, prepare for new situations, and reduce the anxiety they may experience as they approach seventh grade. The curriculum is organized into four units which can be integrated into a teacher's on-going subject matter. The first unit addresses such issues as making and keeping friends, peer pressures, stereotypes, prejudices, and clique formations. The second unit focuses on the self and considers students' uniquenesses, similarities, and values. The effect of a student's sex on his or her self-concept is also examined. The third unit explores human sexuality and human reproduction starting from cell structure and anatomy to sexual reproduction. The final unit explores the various separations an individual makes over a lifetime with particular emphasis on the approaching separation from elementary school.

Discussions, live interviews, films, role-plays, games, and simulations are used to implement the curriculum. Teachers are assisted by parent volunteers and graduate school interns. Thus far, thirty sixth grade teachers have been trained in the use of the curriculum material. Since the units introduce concepts and corresponding teaching techniques which can be presented in any order, some teachers use only one or two of the units and others use the concepts drawn from the entire curriculum.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Train teachers how to use the "Growing and Changing" curriculum.

2. Help teachers determine whether to use the curriculum as a discrete unit or to integrate it into other subjects.
3. Encourage teachers to locate additional materials that will elaborate upon and enrich the curriculum.
4. Ask teachers to test out the materials prior to use.
5. Provide an opportunity for parents to preview all materials before they are used.
6. Provide an opportunity for students to give teachers written and verbal feedback at regular intervals to help teachers evaluate the effectiveness of the material.
7. With the assistance of teachers conduct small group discussions to help students process the information they have learned.
8. Arrange an evening meeting for parents and their youngsters to meet with teachers to discuss the learning experience.

#### MATERIALS AND EQUIPMENT:

##### Curriculum

"Growing and Changing" worksheets  
Available through the Bureau of Student Services, 31 St. James Avenue, Boston, Massachusetts, 02116.

##### Films

###### Hopscotch

###### Then One Year

Both available through Churchill Films,  
662 North Robertson Boulevard, Los Angeles, California, 90069

###### Claude

Available through Pyramid Films, P.O.  
Box 1048, Santa Monica, California, 90406

Film projector and screen.

#### COST:

Film rental                \$25 per film

#### Personal Counseling: Elementary

<p>TITLE: Helping the New Child in School LOCATION: Wildwood Elementary School, Amherst, Massachusetts, 01002 CONTACT PERSON: Philip Clarkson, (413) 549-6300</p>
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#### OBJECTIVES:

1. To help a child adjust to a new school.
2. To provide ongoing support for the student in the new environment.

#### DESCRIPTION:

Helping the New Child in School is a program for elementary students entering Wildwood after the school year has begun. When a student is initially enrolled in the school the counselor has a personal interview with him or her and the parents. The interview is designed to elicit expressions reflecting the student's feelings about his or her new situation and to obtain some information about his or her previous experiences, interests, and self-image. The counselor next introduces the student to other students and teachers and invites the parents to Wildwood's monthly parent-administrator coffees. The classroom teacher appoints a "buddy" to help the new child become familiar with the school, the staff members, and their respective functions. The "buddy" is selected on the basis of the new student's interests and neighborhood. Frequently the "buddy" is also fairly new to the school. This "buddy" relationship continues for a three day period on a formal basis, and often is maintained. These early contacts with parents and their children are also designed to help parents ask questions about the school and to help school personnel be more cognizant of individual concerns.

This program provides the counselor with the opportunity to help parents, teachers, and administrators deal more effectively with new students. Helping The New Child in School serves approximately thirty students and their parents each year and has been in operation for five years.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Initial enrollment information about the new student should be obtained from the school secretary.



2. Interview the parent(s) and student and complete an interview form.
3. Confer with the classroom teacher(s) after the teacher reviews the interview form.
4. Introduce the student to his or her teachers and to a few of his or her classmates.
5. Initiate opportunities to talk with the student about his or her new school and his or her adjustment to it.
6. Maintain contact with the student's parents and encourage them to come to school to meet and talk with the school principal and teachers.

MATERIALS AND EQUIPMENT:

None

COST:

None

Personal Counseling: Elementary

<p>TITLE: Human Development Program*</p> <p>LOCATION: Estabrook School, Lexington, Massachusetts, 02173</p> <p>CONTACT PERSON: Marie Harleston, (617) 862-7500</p>
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OBJECTIVES:

1. To increase students' feelings of self-esteem.
2. To increase students' abilities to recognize and communicate feelings.
3. To provide a collaborative relationship between school staff and parents.

DESCRIPTION:

The Estabrook School provides students with an opportunity to become more aware of their growth, social behavior, and feelings. Six students are identified to participate in small group sessions held once a week for a period of six weeks. Sessions last for thirty to forty minutes and are led by the school counselor. Issues discussed by the group include getting along with others, respecting the property of others, scapegoating, and establishing self-control.

Students are selected for participation by the school counselor after consultation with classroom teachers and with the parents of referred students. Four students who are experiencing similar school adjustment problems, such as disruptive classroom behavior or difficulty relating to peers, are included in the group. Two other students who appear to be progressing in school without difficulty are also included.

Counselors and teachers consult weekly about each student's progress both within the group and within the classroom. The counselor also keeps in close contact with each student's parents. The parent, teacher, and counselor jointly decide how long to continue the group experience for the student and when to terminate it.

SUGGESTIONS FOR IMPLEMENTATION:

1. Establish strong lines of communication with the school staff by clearly explaining the purpose of the group and the types of students who might benefit from participation.

2. Discuss the group with parents of referred students and obtain permission for children to participate.
3. Establish groups of six students, four of whom have related problems, and two of whom are progressing well in school. Group members should be similar in age.
4. Ensure that each student in the group has the opportunity to have the complete attention of others in the group session. (Use a device such as the "magic egg.")
5. Confer with the child's teacher(s) on a weekly basis to discuss the impact of the group on classroom behavior.
6. Maintain contact with each child's parents to assess the impact of the group on behavior at home and to keep parents informed.

#### MATERIALS AND EQUIPMENT:

"Magic Egg" for use with kindergarten through fourth graders

#### COST:

None

\*Note: The Self Image Program at the Dutile School, Billerica, Massachusetts is similar to this program. A unique feature of the Dutile School program is the participation of fifth grade students who at one time had difficulties similar to those being faced by current group members. The fifth graders share their experiences with their peers and provide role models for group members. For more information, contact Vincent Pagliaralo, (617) 663-2131.

Personal Counseling: Elementary

<p>TITLE: Outward Bound Program          LOCATION: Bowman School, Lexington, Massachusetts, 02173          CONTACT PERSON: Prudence Gay, (617) 862-7500</p>
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#### OBJECTIVES:

1. To help students learn how to help one another within a group.
2. To improve students' abilities to work cooperatively.
3. To help students increase their self-confidence through group achievement.
4. To help students recognize the value of human interaction in problem solving.
5. To help students develop increased levels of agility and physical coordination.

#### DESCRIPTION:

This is an outdoor program modeled after Outward Bound and Project Adventure. The program includes several activities which make use of physical structures built by Lexington High School students evaluated under Chapter 766.

One class participates in the program at a time. The class is divided into small groups and each group is given a particular task to complete. Activities focus on group cooperation where the stronger group members help the weaker and the weaker help the weakest until the group accomplishes its goal. In one activity, the group must hoist a tire over an eight and one half foot pole. In another, each group member must jump from blocks of wood to progressively taller blocks of wood and then swing, gymnast style, over a bar. Often, students who have difficulty achieving in academic areas excel in this program.

All activities are supervised by students or adults, who watch to ensure that students do not get hurt. Paraprofessionals, parent volunteers, and other school staff members also participate in group activities and meet with the small groups to discuss the group experience.

Through the program, principals, counselors, parents, paraprofessionals, and students have the opportunity to work together on a collaborative basis. Thus far each fifth and sixth grade class in the school has participated in the program for an eight week period. Activities can be modified, or new ones developed, to expand the program to operate for longer periods of time.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Visit Bowman Elementary School to view structures.
2. Become familiar with, and if possible attend, either an Outward Bound course or Project Adventure workshop.
3. Locate open space which can be used to build physical structures.
4. Obtain approval to use the land.
5. Obtain needed materials and build structures.
6. Use the structures with one class at a time.
7. Divide each class into small groups with a proportionate number of boys and girls.
8. Introduce each small group to one of the structures.
9. Teach the group members how to use the structure and how to supervise one another.
10. Discuss the experience with the group after they finish the activity.
11. Have the group move on to another structure and repeat the process.

#### MATERIALS AND EQUIPMENT:

Lumber

Telephone poles

Cables

Tires

#### COST:

Materials        \$700

Personal Counseling: High School

TITLE: Contemporary Life Awareness Series
LOCATION: Nashoba Regional High School, Bolton, Massachusetts, 01740
CONTACT PERSON: Steven O'Leary, (617) 779-2257

#### OBJECTIVES:

1. To provide a forum for students to learn about a variety of social and mental health problems.
2. To inform students of referral services in their area.
3. To provide students with a "door opener" for personal counseling.

#### DESCRIPTION:

The Contemporary Life Awareness Series evolved last year from the guidance department's concern over students' lack of awareness about social and mental health problems.

The series is planned by an advisory group composed of counselors, students, parents, teachers, and administrators. This group determines topics of interest, and locates experts on these topics who can make presentations to assemblies held for all interested students. Topics addressed last year included coping with depression, teenage sexuality, child abuse, and drug and alcohol abuse.

Each month a program on one area of interest is presented. The usual format includes a film on the subject, a speaker representing a local social service agency, and a question and answer period. After each program, follow-up discussion groups are held in the guidance office during the rest of the day for all interested students. Led by the guidance counselors, these groups are "door openers" for students to begin to discuss issues which they may not have felt comfortable discussing before. During the sessions, students can also obtain more information on referral sources which they may need immediately or in the future.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Meet with students to determine student interest in the program.
2. Form an advisory group of students, teachers, administrators, counselors, and parents to



select topics, locate resources, and organize assemblies.

3. Publicize the nature of each assembly to students.
4. Schedule time and staff for follow-up discussion groups in the guidance office.
5. Provide interested students with referral information and establish a follow-up procedure as a check on the effectiveness of the referral.
6. Evaluate the effectiveness of each program through the use of written evaluations by students.

#### MATERIALS AND EQUIPMENT:

##### Filmstrips

"Human Growth -- Part Three"

"Young, Single, and Pregnant"

"Alcohol: What's In It For Me?"

All available through Perrenial Education  
Films, P.O. Box 236, Northfield, Illinois  
60093

##### Microphone

Film projector and screen

#### COST:

Film rental      \$75 (\$25 per film)

# EDUCATIONAL AND CAREER COUNSELING

Educational and career counseling helps students identify their skills, competencies, values, and preferences, and expand their self-confidence. Counselors help students use this information to identify and select future career possibilities.

Educational counseling and career counseling go hand in hand. Career counseling should assist both college and non-college bound students as they consider educational alternatives or formulate and pursue career goals. Students planning to move immediately into the job market upon completing high school should be given as much counseling attention for their initial job placement as college-bound students are given in selecting a college.

Educational and career counseling should begin in the elementary school. Classroom teachers should give all students an understanding of the nature of work and a basic awareness of career and life opportunities. Parents should be informed and involved throughout this process. Furthermore, parents and other community residents can act as excellent classroom resources by discussing their occupations with students.

A variety of activities on all levels should be employed to widen students' awareness and knowledge of careers and post secondary education. Speakers from various businesses, industries, and professions, particularly in those areas where men, women, and racial or ethnic minorities are under-represented, should be invited to discuss their work with students. Industry-education-labor councils can be particularly helpful in organizing and promoting career awareness programs. Patterns of racial and sexual stereotyping in career counseling must be strongly attacked and eliminated.

Group techniques can be an especially useful tool to reach more students at one time. Groups provide an opportunity to share information and to surface questions and concerns. Students can help each other recognize their strengths and limitations and then move forward with greater confidence toward setting their individual educational and career goals.

Technology such as computerized information systems and career resource centers is an important backup to the counselor's personal attention to students. Computer activities and simulations can help students identify their interests, skills, and aptitudes but this technology should not be used as the only method of career counseling. It must be used in conjunction with personal interaction between counselor and student.

Students should be provided with opportunities to gain work experience before leaving school. Work study, cooperative education, and internships should be integral parts of the career and educational counseling experience, and should be accessible to all, not just students with direct vocational interests. Administrators should lead the way at the local school level to encourage these opportunities for all students.

Many of these activities and directions are evident in guidance and counseling programs across the state. Barnstable Public Schools, Hyannis, begin career awareness in the elementary schools and utilize various community resources. The Paxton Center School focuses on increasing student awareness about abilities and talents by having students prepare research reports on selected careers. Harwich Junior High School uses shadowing experiences and community interships to accomplish this same goal. The Palmer Public Schools have a three stage approach to career exploration. Weeks Junior High School, Newton, exposes students to a variety of job and career options available in community settings, hospitals, and museums. The career education program at Foxborough High School has three components - school, home, and community. The Newton North High School career center is staffed by a full time counselor and situated in the center of the school's activity. At Pittsfield High School, students have a month long internship in an actual work setting. An eleventh grade psychology class at Classical High School, Springfield,

includes several activities that explore possibilities in that field. Several high schools such as Ipswich High School have specialized counseling services to help potential dropouts in school. Finally, Bowen School, Newton, helps students overcome the effects of sex role stereotyping on career choice.



## Educational and Career Counseling: Elementary

TITLE: Boy's and Girl's English LOCATION: Bowen School, Newton, Massachusetts, 02159 CONTACT PERSON: Sophia Fitzhugh, (617) 522-7361
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### OBJECTIVES:

1. To have students become more aware of their own individuality.
2. To help students overcome the negative effects of sex role stereotyping as they examine career choices.

### DESCRIPTION:

Once a week, the sixth grade English teacher devotes class time to examining cultural definitions of social roles and responsibilities. The roles of male, female, son, daughter, consumer, athlete, citizen, and others are discussed with an emphasis on the obligations, benefits, and responsibilities of each role. These discussions focus on the ways in which individuals are treated differently because of their sex and on the portrayal of males and females in literature, films, and on television. A series of worksheets developed by the course teacher is used to present new concepts and stimulate discussion.

Students are actively involved in identifying sexism in school materials and are asked to look for sexist advertising and programming on television. Student observations are the basis for class discussions about career choices.

Every few weeks, professionals discuss their work and personal and career development with the class. Particular effort is made to help students overcome stereotypic sex role attitudes about vocations by inviting individuals whose occupations represent a change in traditional sex role stereotypes. Some past guests have included a pediatric nurse, a police officer, a politician, an attorney, a doctor, a nursery school teacher, a composer, a restaurant owner, a carpenter, and an architect.

### SUGGESTIONS FOR IMPLEMENTATION:

1. Obtain a copy of the "Boy's and Girl's English" worksheets.
2. Develop additional activities focusing on

concepts addressed by each worksheet.

3. Meet with parents to discuss program objectives.
4. Send a program description to all parents.
5. Identify guest speakers.
6. Identify teachers, parent volunteers, and student teachers to lead and stimulate discussions, and to assist with worksheet exercises and with small group activity.
7. Obtain verbal and written feedback at regular intervals.

### MATERIALS AND EQUIPMENT:

"Boy's and Girl's English" worksheets  
Available through Sophia Fitzhugh, Bowen  
School, Newton, Massachusetts, 02159

### COST:

Duplication of materials      \$20

Educational and Career Counseling: Elementary  
and Junior High School

TITLE: Harwich Career Education Program  
LOCATION: Harwich Junior High School, Harwich,  
Massachusetts, 02645  
CONTACT PERSON: Richard Wainwright, (617) 432-2448

OBJECTIVES:

1. To provide students with career exploration experiences.
2. To provide students with knowledge of how to investigate career opportunities.

DESCRIPTION:

This program is designed for students in grades five through eight to initiate the process of exploring potential careers. Components of this program are: (1) career awareness and self-awareness instruction, (2) the shadow program, (3) community resource and involvement, (4) guest speakers, (5) career oriented newspaper, (6) monthly live student radio broadcasts.

The shadow program is an elective activity for all eighth graders which provides participants with first-hand career experience. The shadow coordinator arranges for the student to spend from several hours to a full day with a person working in, or with experience in, the student's tentative career choice. Whenever possible the student actually participates in the work.

Prior to the shadowing, students are carefully prepared for their experience. Through individual counseling sessions with the shadow coordinator, small group sessions, and independent research, students take a closer look at their skills, values, interests, and tentative career goals. They research the field where they will be shadowing and the world of work in general. This preparation takes a total of three to four hours. Students use a daily activity period along with completing work at home to meet the pre-shadow requirements.

SUGGESTIONS FOR IMPLEMENTATION:

1. Meet with students in groups of eight or less to focus on decision-making exercises, self-awareness activities, and the relationship of personality types to occupational choices.

2. Provide and assist students with individual work assignments designed to prepare them for their "Shadow Day". The assignments should include research of a particular career in two or more resource books such as the Occupational Outlook Handbook, Science Research Associates' Career Briefs, Vocational Biographies, and others. A variety of materials should be available for students with different reading levels.
3. Have students prepare questions to ask during their "Shadow Day" experience.
4. Obtain written parental permission for each child's participation in the "Shadow Day".
5. Arrange for each student to spend several hours or an entire day with a person in the career field chosen by the student.
6. Arrange for each student's transportation to and from the work site.
7. Have students write thank you notes to their "shadow" hosts, complete report forms about the day, and provide them with opportunities to discuss their experiences.

MATERIALS AND EQUIPMENT:

Texts

Occupational Outlook Handbook  
Available through Superintendent of Documents,  
United States Government Printing Office,  
Washington, D.C. 20402

Career Briefs

Available through Science Research Associates,  
155 N. Wacker Drive, Chicago,  
Illinois, 60606

Vocational Biographies Series

Available through Vocational Biographies,  
Box 31, Sauk Centre, Minnesota 56378.

Films

Career education films

Available through Counselor Films, Inc.  
Philadelphia, Pennsylvania, 19103  
and Bell Telephone Company  
Room 104A, 185 Franklin Street  
Boston, Massachusetts 02110

Film projector and screen

Television

COST:

Materials	\$2,000
Salaries for program director and part-time staff*	\$21,000

\*The responsibilities of the part-time staff include shadow program coordination, guest speaker coordination, school newspaper and monthly radio program coordination, and career education.

Educational and Career Counseling: Junior High School

TITLE: Guidance for Seventh and Eighth Graders
LOCATION: Paxton Center School, Paxton, Massachusetts, 01612
CONTACT PERSON: Charles Gruszka, (617) 798-8576

OBJECTIVES:

1. To help seventh and eighth grade students increase their awareness about their interests, abilities, values, and goals.
2. To assist students in expanding their awareness of career information and resources.
3. To foster student decision-making about career and educational choices.

DESCRIPTION:

All seventh and eighth graders at the Paxton Center School are provided with a structured, weekly guidance experience designed to help them increase their self-awareness so they can make reasonable educational and career choices. Over a two year period, each student receives approximately fifty hours of group guidance.

During the seventh grade, meetings focus on raising students' level of self-awareness. General discussions about careers are a secondary focus at this time. Strategies used by the counselor include values clarification exercises, classroom discussions, informational presentations, and small group activities. In eighth grade, meetings focus more on individual choices. Students learn how to make decisions and investigate specific careers that relate to individual interests. Interest surveys are used to help individuals make choices. All results are shared with parents.

The final activity in the two year cycle is the development of a research report on a specific career of interest to the student. To complete this assignment, students utilize materials from the school's career resource center, interview people currently in the profession, and assess the career's suitability to the student's abilities, goals, values, and interests. Each student keeps a folder of materials accumulated during the program as a guide for future decision-making.

Teachers are encouraged to follow up guidance



lessons with materials about various careers. The counselor helps teachers to develop appropriate materials and to make presentations on careers. The counselor and teachers work cooperatively in planning career days for students.

This guidance course is supplemented by assemblies on high school course selection, evening parent meetings, field trips, and individual counseling.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Secure the support and cooperation of teachers and administrators by presenting the model to faculty and administration via staff meetings.
2. Inform parents of the nature and intent of the guidance course through letters mailed home and handouts distributed at PTA meetings.
3. Develop a guidance curriculum tailored to meet student needs by defining objectives, surveying commercially available materials, and selecting relevant materials and/or developing original ones.
4. Develop a career resource section in the school library to house materials used in the guidance course.
5. Arrange for each seventh and eighth grade class to have a full period of guidance each week.
6. Meet with interested classroom teachers to explore possibilities for integrating career education concepts into their curriculum.
7. Conduct a periodic review of the course based on an assessment of student performance in meeting objectives and from comments and observations of students, faculty, and parents.

#### MATERIALS AND EQUIPMENT:

##### Career Kits

Available through Careers Incorporated, Largo, Florida, 33540 and through Massachusetts View System, P.O. Box 6, Newton Upper Falls, Massachusetts, 02164

Supplementary career education books, filmstrips, newspapers.

A bibliography of curriculum resources is available through Charles Gruszka, Paxton Center School, Paxton, Massachusetts, 01612 or through the Massachusetts Department of Education, Bureau of Student Services, 31 St. James Avenue, Boston, Massachusetts 02116.

Filmstrip projector and screen

Tape recorder

#### COSTS:

Career Kits and reference materials	\$800
Interest Inventories	100
Supplementary books and filmstrips	600

## Educational and Career Counseling: Junior High School

TITLE: Project MORE (More Orientation Regarding Employment)
LOCATION: Palmer Public Schools, Palmer, Massachusetts 01069
CONTACT PERSON: William Nelligan, (413) 283-9813

### OBJECTIVES:

1. To develop student interest in career exploration.
2. To provide students with information about careers.
3. To provide students with job-seeking and decision-making skills.

### DESCRIPTION:

Project MORE is a program developed and initiated by the superintendent of the Palmer Public Schools. It includes three major components: a career information and guidance center, a cooperative work/study program, and an eighth grade careers exploration program.

The eighth grade program exposes students to eleven fields through a series of mini-courses during the school year: guidance, health, library, science, art, music, wood and metal shop, technical drawing, sewing, and typing. Students have "hands on" experiences in most of these fields, and in all of them, become acquainted with related careers through the use of community resource people, the career information and guidance center, and audiovisual aids. Inservice training helps teachers overcome the negative effects of cultural, ethnic, and racial bias, and sex role stereotyping.

The career information and guidance center staff and materials not only help support the eighth grade careers exploration program but also introduce career education to high school classes. In fact, two Career English classes have been developed as part of this effort, and all seniors learn the purpose of a resume, and how to write one. A career-of-the-week program at the high school and career days at the elementary schools introduce students to many careers through the use of community resource people.

A very important part of the career information and guidance center's activities is the group guidance and individual counseling by the occupational guidance counselor in charge of the center. The counselor works closely with teachers and students as well as with other guidance staff at the high school.

The third segment of Project MORE is the cooperative work/study program. The program is open to all students and presently about twenty percent of the students enrolled are going on to further education, twenty percent are special needs students, and the rest are general education students. New students to the program attend a semester class devoted to values clarification and decision-making skills, completion of job applications, job-hunting skills, and mock interviewing. On-the-job training, usually with pay, provides students with the opportunity to learn what it means to be on time, follow directions, and get along with others.

The counseling and support services of the work/study coordinator, who is a guidance counselor with work/study expertise, lends a feeling of security to the participants. The counselor's duties include career and educational planning and testing; human relations; and family, drug, and personal counseling.

### SUGGESTIONS FOR IMPLEMENTATION:

#### A. Eighth Grade Career Exploration

1. Organize a committee including administration, guidance, and interested staff to develop an overview of the proposed program and fields to be included in the program.
2. Ask selected staff to develop mini-courses in their fields following the guidelines suggested by the program committee.
3. Identify community resource people and other resources to support each mini-course.
4. Set up a schedule of mini-courses for eighth grade students using one period each day throughout the year, rotating groups of students through each of the mini-courses.

## B. Cooperative Work/Study Program

1. Have director of guidance, high school administration, and one or two interested staff members develop guidelines for a work/study program.
2. Select an advisory committee from business and industry to review the suggested proposal.
3. Review the potential costs with the superintendent or his designee, and determine the advisability of a presentation to the school committee.
4. Have superintendent or the committee present the proposal to the school committee.
5. Once the proposal is accepted, recruit and select a cooperative work/study coordinator.
6. The cooperative work/study coordinator, with the help of the advisory committee, should seek work sites in the community or region and more fully develop the in-school program.
7. Staff, parents, and students should be provided with an overview of the program by the work/study coordinator and administration.
8. With the help of guidance department and school administration, students should be selected to participate in the first year of the program.

## C. Career Information and Guidance Centers

1. Organize a committee composed of the director of guidance or another guidance representative, a teacher, and an administrator, and develop guidelines for a career information and guidance center.
2. Review with the administration and superintendent the feasibility of a proposal to the school committee, including the costs of such a program.
3. Make the proposal to the school committee through the superintendent or members of the committee.

4. If the proposal is approved, recruit and select an occupational guidance counselor to head the center.
5. The occupational guidance counselor and appropriate administration should select a clerk for the center.
6. The career information and guidance center head, with the help of members of the original committee, should select materials and equipment for the center and develop a layout to house equipment and materials.
7. Staff and students should be scheduled through the center during the first year for orientation purposes.

## MATERIALS AND EQUIPMENT:

### Texts

#### Career Briefs

Available through Science Research Associates, 155 N. Wacker Dr., Chicago, Illinois, 60606

#### Popeye comics

Available through King Features, Inc. 235 East 45th Street, New York, N.Y.

#### Vocational Biographies Series

Available through Vocational Biographies, Box 31, Sauk Centre, Minnesota, 56378

### Career Kits

#### "Career Games"

Available through Science King Associates, 229 East Erie Street, Chicago, Illinois

#### "Career Opportunity Boxes"

Available through Time Share Corporation, Box 974, Hanover, New Hampshire 03775

A complete annotated bibliography of materials is available through William Nelligan, 24 Converse Street, Palmer, Massachusetts, 01069.

### COST:\*

Salaries (professional and non-professional staff)	\$22,513
Capital Outlay and Equipment (video tape recorder, video camera, cassettes, two nineteen inch televisions, Massachusetts Occupational Information System computer terminal**)	\$10,675



Travel (conferences, transportation to  
sites, expenses for work/study  
coordinator) \$625  
Materials and Equipment (texts, film-  
strips) \$5,900

\*Project MORE was funded by Title IV-C for \$41,300  
beginning July 1, 1978. Second year funding was  
approved for 1978-79 for \$37,700.

\*\*The Massachusetts Occupational Information  
System (MOIS) is also known as the New England  
Occupational Information System (NEOIS). The  
system provides regional information on occupa-  
tions, training, and scholarships, as well as  
an interest inventory.

Educational and Career Counseling: Junior High  
School

TITLE: Upstart LOCATION: Weeks Junior High School, Newton, Massachusetts, 02159 CONTACT PERSON: Irene Bickelman, (617) 552-7582
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OBJECTIVES:

1. To provide participating students with indi-  
vidualized career exploration programs.
2. To provide students with a spring-board for  
new interests, opportunities, and directions  
in and after high school.
3. To help students expand their self-awareness.
4. To help students develop a greater sense of  
self-worth.

DESCRIPTION:

Upstart is a career exploration program which pro-  
vides a range of career experiences and counseling  
services to seventy eighth and ninth grade students  
in Weeks Junior High School. In the eighth grade,  
students identify interests, listen to guest speak-  
ers discuss their careers and the factors influ-  
encing their career choice, and participate in  
visits to community sites. Ninth grade students  
are taught job-seeking skills and are given a paid  
community placement of their choice. Some of the  
work settings include: the Mayor's Office at  
Newton City Hall, the Office for Children, the Mu-  
seum of Science, Harvard Observatory, New England  
Conservatory, Peter Bent Brigham Hospital, and the  
Sierra Club.

School personnel, community representatives, and  
parents work cooperatively to implement the pro-  
gram. A teacher liaison discusses individual  
student's Upstart experiences with the student's  
classroom teachers. The school counselor follows  
the student's progress through eighth and ninth  
grade to provide ongoing support and assistance.  
The school psychologist is the student's consultant  
for any problems on the job and assists the student  
in gaining a perspective on the problem. The com-  
munity resource person plans trips, provides speak-  
ers and jobs, and maintains communication with the  
supervisor on the job. Parents provide permission  
for the student's participation and are kept  
informed about the child's progress.

Students selected to participate in Upstart vary with respect to academic performance, attitudes towards school, and career aspiration. Two thirds of those selected have a history of behavior problems in school. The remaining third are students who are progressing without difficulty in the school environment as a result of their involvement in Upstart. Many participants have expressed a new desire to attend college.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. At the end of seventh grade, obtain teachers' recommendations for Upstart candidates.
2. In the fall of the eighth grade, teachers should review recommendations and with the school counselor select students to participate in Upstart.
3. Obtain written parental permission for the selected students' participation.
4. At the first Upstart session, have each student complete an interest survey.
5. Each student should discuss his or her responses with a team composed of the school counselor, psychologist, career guidance specialist, and a teacher.
6. Hold weekly sessions for the students during which a person from a field of expressed interest speaks about his or her work.
7. Arrange for each student to visit four work settings of his or her choice.
8. Have students write an informal evaluation about their visits and what they learned from these experiences.
9. Help each student select a tentative work site.
10. In the fall of the ninth grade, have each student review, with the team, his or her eighth grade evaluations and then make a commitment to a work experience.
11. Prepare students for an interview at their chosen work sites by having them role-play and discuss the interview experience with team members.

12. Provide opportunities for team members to confer with one another about each Upstart student.

#### MATERIALS AND EQUIPMENT:

"This About Me" Interest Survey  
Available through the Massachusetts  
Department of Education, Bureau of  
Student Services, 31 St. James Avenue,  
Boston, Massachusetts, 02116.

#### COST:

Transportation (use of an automobile, bus, and MBTA tickets)	\$314
Payroll (\$1.75 an hour for three hours per week for forty-one students placed in non-profit organizations)	\$1,500
Lunch money (for students who receive free lunch at school)	\$30

## Educational and Career Counseling: High School

TITLE: Career Education

LOCATION: Foxborough High School, Foxborough,  
Massachusetts, 02035

CONTACT PERSON: Carol Kramberg, (617) 543-4811

### OBJECTIVES:

1. To provide students with career awareness and exploration opportunities.
2. To encourage faculty interest and participation in career education.
3. To increase parent and community awareness about career education, and to promote strong parental involvement in students' career decision-making.
4. To develop business and industry support and commitment to career education that will enable the school to provide students with a wide range of career oriented experiences.

### DESCRIPTION:

Foxborough's career education program has three components: the school, the home, and the community. Each component includes a variety of different activities and objectives.

The school component includes a Career Information Center (CIC), career curricula, and career guidance services. This component is the most well developed of the Foxborough program and has been in operation for two years. The Career Information Center is the focal point for all career education activities at the high school. The Center provides services for individual students and groups of students. Group guidance activities are based on a four-phase career development process -- self-awareness, career awareness, career exploration, and career/life planning. A team of faculty representatives from the school's academic and support service departments use the Career Information Center for workshops, inservice programs, and curriculum development activities to infuse career education concepts into their subject areas.

The family component was developed in response to expressed parent needs and interests. Activities are planned and conducted to provide parents with more information about career planning for their

children. A parent workshop entitled "Career Education Begins at Home" and a brochure have been the first steps in school and home cooperation.

A newly formed Industry Education Council is the focal point of the program's community component. The council assists Foxborough students in developing awareness of the world of work through activities involving staff and students.

### SUGGESTIONS FOR IMPLEMENTATION:

1. Identify major areas of school and community support for career education such as the school committee, parents, and system-wide administrators.
2. Review current career oriented programs such as industrial arts exploratory programs and distributive and alternative education programs.
3. Work with administrators, students, and school personnel to draft a long-range plan (three to five years) for career education which reflects the needs and goals of the system.
4. Identify short-term objectives.
5. Plan public relations and communications activities, such as developing brochures and handouts, that maintain visibility and promote an understanding of the program.
6. Document activities and provide monthly progress reports to building and system-wide administrators.
7. Evaluate program activities on their individual merit, their importance to the overall programs, and their adherence to the needs of the students, staff, and parents.
8. Maintain frequent contact with local news media, being sure to inform them of special activities and programs of interest.
9. Meet at regular intervals with representatives from school, community, business, and industry as further programming is planned.
10. Assess, plan, and revise the development and implementation of the program at frequent intervals.



## MATERIALS AND EQUIPMENT:

### Texts

#### Chronicle File of Facts

Available through Chronicle Guidance,  
Moravia, New York, 13118.

#### Vocational Biographies Series

Available through Vocational Biographies,  
Box 31, Sauk Centre, Minnesota, 56378.

### Career Kits

#### Occupational Exploration Kit

Available through Science Research  
Associates, 155 N. Wacker Dr., Chicago,  
Illinois 60606

Massachusetts Occupational Information System \*

### Audio visual equipment

## COST:

Massachusetts Occupational Information System*	\$2,500
Salary (for paraprofessional assistance)	6,500
Reference materials	1,000
Professional materials	100
Vocational Biographies Series	92
Magazines	50
Postage	250

\*The Massachusetts Occupational Information System (MOIS) is also known as the New England Occupational Information System (NEOIS). The system provides regional information on occupations, training, and scholarships, as well as an interest inventory.

## Educational and Career Counseling: High School

TITLE: Career Guidance Resource Center

LOCATION: Newton North High School, Newton,  
Massachusetts, 02160

CONTACT PERSON: Myra Trachtenberg, (617)  
552-7470

## OBJECTIVES:

1. To provide students with a variety of experiences that foster career development.
2. To help students make informed occupational and educational decisions.
3. To assist school personnel in developing a career planning curriculum.
4. To serve as a resource for career development within the school.

## DESCRIPTION:

The Newton North High School Career Center is an integral part of the counseling department and offers a host of guidance services to students and faculty. It has a full-time staff of a counselor, teacher-aide, and secretary, with part-time assistance from work/study students, parent volunteers, and when possible, a counseling intern.

Using local community resources, the Center staff organizes career conferences in the school. The Center staff monitors career materials to determine which materials are consistently in demand and concentrates on these career fields in conference planning. An effort is made to invite speakers who will help in reducing ethnic and sex role stereotyping. At each conference information concerning available training facilities, educational requirements, trends in the occupational field, working conditions, and the potential for eventual employment in the community is included. Two recent conferences were "Careers in Public Service: Law Enforcement and Firefighting" and "Career in Science Without Four Years of College."

Center staff collaborate with the local Chamber of Commerce to design and conduct a career orientation program that provides students with a variety of experiences in actual work settings. Students participate in one or two day experiences, where they "shadow" or observe, and sometimes work with, the person they are shadowing.

Career Center staff also assist departments and individual teachers in integrating career components into their disciplines through courses, workshops, and individual consultations. Recently the career counselor worked with a team of counselors and teachers to develop curriculum and workshop materials on career planning. Members of the counseling department now teach the curriculum as a semester-long course. The curriculum includes units of understanding one's self, understanding the world of work, and developing personal career plans. One section, Social Issues Related to Work, addresses the changing roles of women and men and role expectations. This curriculum has also been adapted by learning disability specialists, counselors, and teachers for use in various special needs settings.

To encourage students to explore occupational possibilities and to serve their community, the center staff, with the assistance of students, has published Wide Horizons, a bulletin on volunteer and service opportunities. They also operate a "Jobs for Youth" placement service which assists students in their quest for part-time, full-time, and volunteer opportunities.

SUGGESTIONS FOR IMPLEMENTATION:

1. Gain administrative and staff support for a career center.
2. Gain community support via PTA groups, the local Chamber of Commerce, other business groups, education groups, and concerned citizens.
3. Solicit input from counselors and teachers on materials for the center.
4. Determine which services to offer through the center by surveying students and faculty.
5. Meet with the school library staff to define a working relationship.
6. Select a suitable space that is within an established traffic pattern of the school.
7. Assign adequate staff to operate the career center.

8. Determine the needs of the school population and order appropriate equipment and materials.
9. Promote the career center and its activities through the local media, school newspapers, notices, bulletins, posters, and displays.
10. Evaluate the center at regular intervals to ensure that changing needs are being met.

MATERIALS AND EQUIPMENT:

Texts

Vocational Guidance Manual

Available through National Textbook Company, School Library Division, 8259 Niles Center Road, Skokie, Illinois, 60076.

Reference Books

Available through Franken Watts Publishers, 730 Fifth Avenue, New York, New York 10019

Monographs

Available through Institute for Research, 610 South Federal Street, Chicago, Illinois

Career Briefs

Available through Careers, Incorporated, Box 135, Largo, Florida, 33540; Chronicle Guidance Publishers, Incorporated, Moravia, New York, 13118; and Science Research Associates, 155 N. Wacker Dr., Chicago, Illinois 60606

COST:

Salaries (full-time counselor, aide, and secretary)	\$35,000
Materials (reference books, subscriptions, and new career books and pamphlets)	2,000



## Educational and Career Counseling: High School

TITLE: Experience School Program  
LOCATION: Pittsfield High School, Pittsfield,  
Massachusetts, 01201  
CONTACT PERSON: Edmund Plummer, (413) 499-1234

### OBJECTIVES:

1. To offer students day to day work experience that has the potential for leading to future employment.
2. To help students begin to explore career options.
3. To educate the community about the positive value of high school students as employees.

### DESCRIPTION:

The Experience School Program\* uses community resources to provide students with a month-long internship in the world of work. Ten students participated in the pilot program in the spring of 1978. Their placements included an accounting office, a travel agency, a riding school, a youth crisis and counseling center, a bank, a law office, a hospital laboratory, and a therapy center.

Prior to being placed at these work sites, students were taught job-seeking skills and resume writing. Professionals from the community also came to school to discuss their careers with the students. Based on their interests and skills, students then selected career areas in which to intern.

Because students would be out of the regular school program for an extended period of time, parental and teacher approval for student participation in the program were first obtained. Students then made contractual agreements with teachers to allow them to make up missed class work. While course credit is not given for participation in this program, letters of recommendation to prospective colleges and career sites are available upon student request.

### SUGGESTIONS FOR IMPLEMENTATION:

1. Gain administrative, faculty, and community support for the program.
2. Hire (or obtain a CETA position for) an assistant to the program coordinator.
3. Through a general assembly and through small group sessions, disseminate information to students on the purpose and operation of the program.
4. Help interested students obtain permission to participate from their parents and teachers.
5. Meet with participating students three to five times to prepare them for their work experience.
6. Help students determine their areas of strength and interests.
7. Identify several possible career areas based on each student's strengths and interests.
8. Place participating students in work situations.
9. Evaluate the experience with students by having them share their placement experiences and journals.
10. Discuss students' job performance with participating employers.
11. Evaluate the job search, work experience, and counseling to determine if they helped bring students closer to career decisions.

### MATERIALS AND EQUIPMENT:

None

### COST:

Office supplies	\$ 50
Telephone	100
Travel expenses (for trips around the local area to investigate programs)	250

\*This program is not in operation at the present time. It is included in this publication, however, because it can be adapted in other school systems.



Educational and Career Counseling: High School

TITLE: Exploring Careers and Social Services  
LOCATION: Classical High School, Springfield,  
Massachusetts, 01103  
CONTACT PERSON: Iris Crawford Danforth  
(413) 733-2016

OBJECTIVES:

1. To increase students' awareness about careers related to their eleventh grade psychology class.
2. To enable students to explore the community and identify school and social service agency personnel.

DESCRIPTION:

This program encourages students to become active participants in their own learning by providing them with the opportunity to explore, research, and invite school and community resource personnel into their classroom. Guest speakers from psychology-related professions are invited by the students to discuss their specific job backgrounds, responsibilities, and requirements. Prior to each guest speaker's presentation, the classroom teacher provides an overview of the speaker's professional responsibilities. Recent guest speakers have included principals, psychiatrists, psychologists, child care workers, protective service unit workers, and social workers.

Presentations provide students with information about daily activities and necessary educational preparation, and also provide opportunities for students to witness on-the-job techniques. A question and answer period provides a lively forum for discussing other pertinent issues.

SUGGESTIONS FOR IMPLEMENTATION:

1. Conduct classroom discussions and exercises to help students identify occupations or career areas of interest to them.
2. Divide the class into groups of six. The task for each group is to identify two agencies or individuals to make presentations.
3. Have students explore education and social services in the community for potential guest

speakers. Examples of resources include the Chamber of Commerce Directory, the Junior League Social Service Agency Directory, and the Yellow Pages.

4. Have each group of students draft a letter of invitation to two potential guest speakers.
5. Have each group follow up on the letters with phone calls.
6. The day following each presentation pass out a mimeograph sheet summarizing the presentation, and have students discuss their observations and insights about the previous day.

MATERIALS AND EQUIPMENT:

School stationery

Postage

COST:

Postage stamps	\$2
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## Educational and Career Counseling: High School

TITLE: Project OPEN

LOCATION: Ipswich High School, Ipswich, Massachusetts, 01938

CONTACT PERSON: Robert Pederson, (617) 356-0192

### OBJECTIVES:

1. To encourage students who have dropped out of school, or who are considering dropping out, to complete high school.
2. To provide students with an alternative way to earn high school credits, achieve personal goals, and increase motivation.
3. To help students develop personal and interpersonal skills to improve self-image and enhance their employment opportunities.
4. To orient students to jobs and develop career awareness.

### DESCRIPTION:

Project OPEN is an alternative program designed to encourage potential dropout students to remain in school. Through the use of group process techniques, career and consumer-oriented activities, and a creative approach to basic skill development, students are helped in making goal-centered decisions, and raising their career aspirations. Students are expected to take all the standard academic courses included in the regular high school program, and are given individualized tutorials in each academic subject area. In addition, students may contract to take courses tailored to their individual needs and interests, such as small engine repair and operating a fix-it shop. Group and individual counseling are provided on a regular basis. Class meetings are held at the end of each week and are used as a time for staff and students to together review the week and share ideas and positive and negative experiences.

Through a contractual arrangement between parent, student, and school, twenty-five high school sophomores and juniors can be accommodated in this program in one year. After this time, they are required to return to the regular high school program to complete their graduation requirements.

### SUGGESTIONS FOR IMPLEMENTATION:

1. Form an advisory board comprised of administrators, department heads, and community representatives.
2. Select at least three instructional staff and solicit additional volunteer staff.
3. Locate a suitable facility either adjacent to or nearby the high school.
4. Develop a schedule of courses including tutorials, electives, field trips, work experiences, and academic offerings to meet program objectives.
5. Publicize the program to promote understanding of, and interest in, its goals and objectives.
6. Identify students to be served by the program.
7. Meet with each student to develop his or her schedule.
8. Hold group and individual counseling sessions and classroom meetings at regular intervals to provide academic and personal support and to obtain feedback on the on-going program.
9. If necessary, modify the program based on evaluative data.

### MATERIALS AND EQUIPMENT:

#### Texts

Yodon, James. Energy and Transportation. Englewood Cliffs, New Jersey: Prentice Hall.

Yodon, James. Small Engines. Englewood Cliffs, New Jersey: Prentice Hall.

Yodon, James. Modular Exploration of Technology Series, Englewood Cliffs, New Jersey: Prentice Hall.

#### Inner Change

Available through Human Development Training Institute, La Mesa, California, 92041

Teacher-developed curriculum materials

Slide projector

Tape recorder

Film strip projector and screen

COST:\*

Building rental and equipment	\$15,000
Educational supplies (textbooks, films, and audio visual equipment)	8,000
Salaries (three full-time staff members, one secretary, and one small engine repair instructor)	50,000
Capital outlay equipment for small engine repair equipment and classroom furniture	13,000

\*This program is funded through a three-year Title IV-C grant that covers the salaries of three full-time staff members. The first year's grant totaled \$81,000 with a ten per cent decrease in the second and third year of funding. The school district will support the entire project after the fourth year.





## CONSULTATION

Through consultation, counselors should provide assistance to those who have primary responsibility for students -- such as parents, teachers, and administrators. Counselors should offer information, guidance, and training to help these individuals better discharge their responsibilities. Counselors, however, should not assume these responsibilities but help others to recognize or upgrade their own skills, resources, and authority. Moreover, the counselor should provide important assistance to school staff by coordinating and integrating the efforts of others in addressing the educational needs of young people.

Consultation includes both assisting with student problems and providing information and resources to teachers and administrators. These services have wide implications for the curriculum and instructional objectives of the school. A Stoneham program trains school personnel in classroom management skills to maximize their work with students. At Dover-Sherborn High School, counselors train students to help each other with personal and social problems. Lexington's Human Development program works directly with small groups of elementary students and their teachers to foster personal development. Counselors in Harwich Elementary and Intermediate Schools provide training to parents in child management techniques. Project Potential, Attleboro focuses on career and personal development for junior and senior high school students. Similarly, the Career Research Partnership Workshop, Wellesley provides an intensive one-week career exploration program for both teachers and students. These programs are typical of a variety of ways counselors can and do provide consultation to teachers, students, and parents.

Consultation: Elementary Through High School

TITLE: Training Program in Improving Children's Behavior

LOCATION: Stoneham Public Schools, Stoneham, Massachusetts, 02180

CONTACT PERSON: Robert Heller, (617) 438-5585

#### OBJECTIVES:

1. To train school personnel in effective classroom management skills.
2. To foster creative problem solving skills and to permit more effective use of teacher time.
3. To effectively use support personnel's time in working with teachers and with students who have problems.
4. To foster a climate within the school which facilitates academic and social growth.

#### DESCRIPTION:

Improving Children's Behavior is a training program for kindergarten through twelfth grade teachers, administrators, counselors, school psychologists, and special education staff on effective classroom management. This program consists of six one and a half hour meetings, and services ten to twenty participants at a time. It is offered twice a year after school on a voluntary basis.

Training includes learning how to identify and monitor social and academic behaviors, helping students to self-monitor, contracting with students, and applying principles of learning and reinforcement. Topics include working with hyperactive, withdrawn, learning disabled, and unmotivated youngsters. The program is sequential in nature and organized to allow skills to build upon one another. Participants complete rating sheets at the end of the course and participate in on-going monitoring by maintaining a journal of behavior and performance of their students. They can receive follow-up consultation if desired.

Sessions use films, slides, tapes, handouts, graphs, case studies, and role-playing to assist participants in absorbing materials. Individual projects involving single students or an entire classroom are completed during the course. These projects help participants develop, test, and refine their

newly acquired skills. One such project developed by a teacher participant was designed to allow students with reading problems to earn points for both behavior and performance. Students were then able to exchange points for no homework, free time, or special activities in the classroom.

This training program has been in operation for three years. The Stoneham Public School System offers inservice credit for participants.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Develop a schedule of meeting times and reserve a meeting room.
2. Send out announcements and individual notices about the workshop to school personnel.
3. Help workshop participants devise individual projects which will be used as monitoring devices for participants' progress during the training program.
4. Use staff that have completed the course and have used the procedures as consultants.
5. Design follow-up questionnaires to be used as a long-range evaluation device.

#### MATERIALS AND EQUIPMENT:

##### Texts

DeRisi, William J. and Butz, George. Writing Behavioral Contracts: A Case Simulation Practice Manual. Champaign, Illinois: Research Press, 1975.

Patterson, Gerald R. and Gillian, M. Elizabeth. Living with Children. Champaign, Illinois: Research Press, 1968.

##### Audio visual equipment

##### Curriculum

"Training Program in Improving Children's Behavior" handouts, case studies and worksheets

#### COST:

Texts (each participant)	\$10
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Consultation: Elementary and Junior High School

TITLE: Parent Training Course  
LOCATION: Harwich Elementary and Intermediate  
Schools, Harwich, Massachusetts, 02645  
CONTACT PEOPLE: Mitch Relin, (617) 432-0944  
Marvin Stout, Jr., (617) 432-2420

#### OBJECTIVES:

1. To teach parents child management techniques.
2. To improve communication between parents and their children.

#### DESCRIPTION:

The Parent Training course offered by the counselors at the Harwich Elementary and Intermediate Schools presents specific child management techniques. The course lasts ten weeks with weekly meetings running from 7:00 to 10:00 p.m. At each session, a different skill or topic is presented, discussed, and practiced by participants. Parents are then expected to apply the skill to a home-based project where they identify and keep track of their children's behavior patterns.

The course focuses on learning to relax, employing positive reinforcement, identifying problem behavior, using communication skills to resolve these behavior problems, conducting family meetings, contracting, and establishing rules which emphasize positive rather than negative outcomes.

Unique features of the parenting course include a "spouse component" to inform the non-participating parent of program material and to elicit support in carrying out techniques in the home. Participants also have the option of earning back fees paid at the outset of the program by completing various course requirements which result in a proportional refund. This system provides incentives to parents to try out techniques.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Recruit parents by sending home notes announcing the group with each elementary and intermediate school child, advertising the group in local newspapers, and by sending special invitations to parents who the teachers feel may benefit from the program.
2. Select parent co-leaders who have participated in and/or co-led parent groups.

3. Secure a large well-lit room with comfortable chairs and round tables.
4. If necessary, provide a baby sitting service for program participants.
5. Hold weekly sessions for a group of approximately twenty people.
6. During each session, provide sufficient time for participants to ask questions and practice techniques.
7. Provide for program evaluation by conducting follow-up surveys after each session and several months after the course has been completed.

#### MATERIALS AND EQUIPMENT:

##### Texts

Paterson, Gerald. Families. Champaign, Illinois: Research Press, 1975.

##### Film

Who Did What to Whom

Available through Research Press, P.O. Box 317730, Champaign, Illinois, 61820.

##### Curriculum

"Parent Training Course" worksheets.  
Available through Mitch Relin,  
Harwich Elementary School,  
Harwich, Massachusetts, 02645.

#### COST:

Text (per copy)	\$3.60
Film rental	50.00
Duplication of materials	50.00

Consultation: Junior and Senior High School

TITLE: Project Potential  
LOCATION: Attleboro High School, Attleboro,  
Massachusetts, 02703  
CONTACT PERSON: Barbara Churchill, (617) 226-0089

#### OBJECTIVES:

1. To develop a personalized education program for grades six through twelve in which students relate the arts, sciences, humanities, and technologies to the world of work.
2. To help students acquire the skills necessary to make sound personal, social, and career decisions based on their short and long term goals.
3. To develop a corps of teacher-advisors who will work with small groups of students to help them understand the relationship between their educational experiences and their future roles as adults.

#### DESCRIPTION:

Project Potential is a model program funded by a three year Title IV-C grant. It is designed to personalize education in grades six to twelve using a corps of teacher-advisors trained in career development and inter-personal communication skills.

The first and major thrust of Project Potential is the development of a corps of teacher-advisors in each secondary school who will promote the philosophy, goals, and strategies of the project. Trained through staff workshops, these individuals are committed to working with small groups of students to help them become aware of their potential and to encourage their self-actualization.

Second, workshops in career development are open to all school staff and administrators on a voluntary basis. Led by teacher-advisor teams who have been trained in career development concepts and strategies, the workshops help participants infuse career awareness, decision-making, goal setting, self-awareness, and values clarification into the classroom curriculum. A career resource center and the services of the career specialist are available to staff as they design career-related programs.

Third, teams of guidance personnel develop and implement small group guidance curricula designed to provide more personalized and in-depth services for students. Counselors also provide training and support to the teacher-advisors who work with their counselees.

Finally, mini-grants are available to teachers who would like to design programs which involve students in the community. For example, one science teacher designed a class research project on insect control which involved his class and members of the local Audubon Society.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Secure support and a commitment to the philosophy of the project from the school committee and school administration.
2. Appoint a director to initiate and coordinate the four components of the project and provide information to the community on the goals and activities of the project.
3. Involve staff and community members in planning the program. Project offerings should be presented as ways to become even more effective rather than as a way to become effective.
4. Hire consultants for staff training who are highly skilled and knowledgeable in integrating personal growth strategies into content areas.
5. Establish or utilize an existing inservice training component to encourage participation in skill development.
6. Provide compensation for workshop participants such as inservice credit, remuneration for time, salary increments.
7. Establish a professional library and student career resource center.
8. Establish monitoring devices to assess classroom implementation by participants and student outcomes (for example through pre-and post-tests of students, visits to classes by the project director, and log sheets for teachers to record project related activities).

## MATERIALS AND EQUIPMENT:

### Texts

Harmen; Kirschenbaum, Howard; and Simon, Sidney. Clarifying Values Through Subject Matter. Minneapolis, Minnesota: Winston Press, Inc.

Simon, Sidney; Howe, Leland; and Kirschenbaum, Howard. Values Clarification. New York, New York: Hart Pub. Co. 1972.

Wheelis, Allen. How People Change. New York, New York: Harper and Rowe. 1973.

Canfield, Jack and Wells, Harold C. One Hundred Ways to Enhance Self Concept in the Classroom. Englewood Cliffs, New Jersey: Prentice Hall. 1976.

If You Don't Know Where You're Going, You'll Probably End Up Somewhere Else  
Available through Pennant Educational Material, 8265 Commercial Street, La Mesa, California, 92041

### Filmstrips

"Careers and Lifestyles"

"Adolescent Experience"

"Relationships and Values"

All available through Guidance Associates  
755 Third Avenue, New York, New York 10017

### Curriculum Models

Gelatt, H.B; Veraenhorst, Barbara; and Carey Richard. Deciding  
Available through College Entrance Examination Board, New York, New York. 1972.

Gelatt, H.B; Veraenhorst, Barbara; and Carey Richard. Decisions and Outcomes  
Available through College Entrance Examination Board, New York, New York

Hooker and Fleming, Me and Job  
Available through Educational Design Incorporated, 47 West Thirteenth Street, New York, New York 10011

Hooker and Fleming, Me and Others  
Available through Educational Design Incorporated, 47 West Thirteenth Street, New York, New York 10011

## Career Education Activities for Subject Area Teachers

Available through Abt Publications,  
55 Wheeler Street, Cambridge, Massachusetts 02138

### COST:\*

Salaries (project director and secretary)	\$17,000
Consultation fees	4,000
Workshop texts (per participant)	10

Additional costs include compensation for personnel workshop time.

\*Note: Project Potential is funded by a three year Title IV-C grant. First year funding covered one hundred per cent of the cost, second year covers ninety per cent of the cost, and the third year will be covered for seventy per cent of the cost.



Consultation: High School

TITLE: Career Research Partnership Workshop  
LOCATION: Wellesley Senior High School, Wellesley,  
Massachusetts, 02181  
CONTACT PERSON: Patricia Leonard, (617) 235-7250

OBJECTIVES:

1. To help teachers and students investigate career information related to academic subjects.
2. To train teachers to relate curriculum content to the world of work.
3. To help students become more aware of their interests and career aspirations.

DESCRIPTION:

The Career Research Partnership Workshop is a one week career exploration program offered during the summer by the career counselor at Wellesley Senior High School. Fifteen staff members representing a cross section of academic disciplines, and twenty-one senior high school students are involved in teacher-student partnerships that investigate various careers.

The program is comprised of two phases: group interaction sessions and field work at a variety of job sites. During the group sessions, participants are given practical experience in developing sample job applications, building interviewing skills, reviewing audio visual and career education materials, and reviewing schools and colleges for further training opportunities. Participants also complete evaluations, daily logs, personal journals, and community questionnaire forms.

The field work consists of students and teachers observing or "shadowing" employees and speaking with them about their jobs.

Through their participation in these activities, students and teachers develop closer relationships and an awareness of the attitudes and skills necessary to succeed in the world of work.

SUGGESTIONS FOR IMPLEMENTATION:

1. Meet with teachers and students to explain the program and to develop a roster of possible field placements appropriate to student and

teacher interests.

2. Identify, contact, and visit potential job sites.
3. Hold classroom sessions on interviewing skills, career preparation, and job hunting techniques.
4. Pair up students and teachers and have each partnership team visit a job site.
5. Arrange for the entire group to meet together to share team experiences.
6. Have all participants evaluate each job site experience.

MATERIALS AND EQUIPMENT:

Print materials from career cluster areas

Comprehensive vocational tests

Filmstrips on job hunting techniques and interviewing skills

Materials reviewing college and school programs for further training

COST:

Transportation	\$ 50
Accident insurance policy on each participating student	\$120
Stipend received by each student for their five day participation in the pro- gram*	\$ 60
Stipend received by each teacher for their five day participation in the pro- gram	\$185

\*NOTE: Student stipends were funded by a Career in Depth grant from the Massachusetts Department of Education.

Consultation: High School

TITLE: Peer Counseling  
LOCATION: Dover-Sherborn High School, Dover,  
Massachusetts, 02030  
CONTACT PEOPLE: Florence Cranshaw, (617) 785-1730  
Tom Hughart, (617) 785-1065

OBJECTIVES:

1. To help students develop positive relationships with peers and adults.
2. To give students the opportunity to help each other.
3. To expand students' responsibility and awareness.

DESCRIPTION:

Dover-Sherborn High School believes that guidance and counseling services should be the shared responsibility of a variety of school and community individuals and groups. The peer counseling program allows students to help other students work out personal problems. Trained student counselors help their peers deal with issues such as loneliness, pill or alcohol use, alcoholic parents, and sexual involvement. Counselors act as consultants, trainers, and supervisors. Counseling sessions are coordinated and scheduled by the school guidance counselor to accommodate both student counselors and counselees. Problems such as depression and suicide are referred to adult counselors.

Students interested in becoming peer counselors may sign up for a training course. Eligibility is determined by recommendations from school personnel, passing academic standing, a willingness to grow and learn, and an interview by the program's co-directors and seasoned peer counselors. This training program is offered as a regular part of the high school curriculum. Classes meet twice a week, and students are trained by guidance counselors in observing, listening, responding (to reflect both affect and content), and decision-making.

Information about the program is disseminated through course outline descriptions and word-of-mouth. Also, counselees are encouraged by teachers, the school librarian, counselors, and other teachers to seek peer assistance. Plans are in progress

for pre- and post-testing for evaluation purposes.

SUGGESTIONS FOR IMPLEMENTATION:

1. Build in-school support by presenting the program to teachers at faculty meetings.
2. Build central administration support by sending program descriptions to administrators and discussing the program with the school committee. Include an outline of lesson plans for the peer counselor training course.
3. Use various means--newsletters, community newspapers, presentations to the Parent-Teacher-Student Association--to inform the community about the program.
4. Select co-leaders with training in group leadership to run the peer counselor training course.
5. Schedule the peer counselor training course into the regular school day.
6. Advertise the course to the entire student body. Recruit both boys and girls to be peer counselors.
7. With seasoned peer counselors, interview interested students to determine their eligibility for the training course, and make a final selection.
8. Offer the training course, adapting the curriculum to meet particular needs as they arise.
9. After students have been trained, keep copies of their schedules to facilitate scheduling counseling sessions.
10. Before referring a student to a peer counselor, obtain the approval of both the student and the student's parents.
11. Provide on-going supervision to peer counselors.
12. Evaluate peer counselors through pre- and post-tests.

MATERIALS AND EQUIPMENT:

Filmstrip

"Peer Facilitators: Youth Helping Youth."

Available through Educational Media  
Corporation, P.O. Box 21311, Minneapolis,  
Minnesota

Video tape machine and projector

Tape recorder

Film projector and screen

COST:

Film rental     \$35



## APPRAISAL

Appraisal is perhaps the most sensitive of the five functions of guidance and counseling. Simply stated, appraisal is a realistic examination of the student's abilities, interests and potential, conducted in a positive and supportive environment which conveys to the student a realistic and positive self-image. Any objective tests used--interest, achievement, or aptitude--should diagnose areas of strength as well as areas of deficiency or weakness.

Counselors should be responsible for the selection and administration of appraisal instruments or tests. Counselors should screen tests for bias and should assure appropriate usage of tests and test data. Furthermore, counselors should provide parents and students with an accurate explanation of the purpose and significance of the test prior to its administration. The counselor should also be responsible for the sensitive communication of test results to parents, students, and any teachers or administrators with authorized access to school records. "Sensitive communication" means placing tests and test results in a proper context.

Decisions about careers or college selection should be based on a variety of information and factors, not just a given test result. Information about a student's performance in school, personal goals, extra-curricular activities, and employment is equally important.

Appraisals may provide administrators and teachers with valuable information about instructional or curriculum practices in the school. Counselors should organize and report any information which suggests the need for modifications in the instructional program.

The Quincy Public Schools has a Test Resource Center staffed with a coordinator who maintains an extensive bank of tests and assists counselors in selecting the appropriate measurement or testing instrument. Wilmington High School has a group guidance program for all freshmen. Sessions serve to introduce the high school to the students and provide the students with the opportunity to examine their own aspirations, goals, interests and abilities. The Ninth Grade Exploratory Program at Assabet Valley Regional Vocational School, Marlborough combines test results with extensive career exploration experiences prior to the selection of a specific vocational area.

## Appraisal: Elementary Through High School

TITLE: Test Program of the Quincy Public Schools  
LOCATION: Quincy Public Schools, Support Service  
Center, 100 Brooks Avenue, Quincy, Massachusetts 02169  
CONTACT PERSON: Louise Forsyth, (617) 786-8792

### OBJECTIVES:

1. To provide school personnel with devices to aid in the evaluation of students' needs.
2. To provide instruments for the evaluation of a subject area, a school, or a school system.
3. To provide an educational program that will assist students, teachers, counselors, administrators, parents, and the community-at-large in making appropriate use of test data.
4. To provide staff with a wide range of testing instruments as well as a coordinated approach to testing.

### DESCRIPTION:

In the Quincy Public Schools, tests are one piece of data used in helping students make decisions and are looked at in the context of all the information known about the student. The testing program endeavors to ensure the wise use of this information in addressing student needs. The program includes appraisal of student achievement, aptitude, and interest. City-wide testing occurs in grades four, six, eight, and ten. In addition, each school has a budget to purchase test materials at the request of staff members.

The overall administration of the testing program is the job of the coordinator of testing. The coordinator maintains the Test Resource Center which contains an extensive collection of specimen tests that a counselor or teacher could use, a "bank" of test items, and a tests and measurements resource library. The coordinator works with staff to help them select the measurement device which is the most appropriate for their needs.

One function of the testing coordinator is to provide an educational program about the values of testing. An important aspect of this educational program is training individuals in how to use and interpret tests in a sex-fair and culture-fair manner. For students, there are programs in test awareness and skill building in test taking. After a test,

group sessions are held for high school and junior high school students to discuss test results in a general way. Individual counseling is available for any student who wishes to go into the results in greater detail. Staff has the opportunity to participate in an inservice thirty hour course on testing which is taught by the testing coordinator and carries three inservice credits. They are also able to use the services of the coordinator to gain insights into tests and test results and how to help their students better understand testing.

For the community-at-large, information on the testing program is made available through radio broadcasts, newspapers, newsletters, and speaking engagements by the coordinator. In addition, community members can attend an annual "mini-course" on tests and measurements which is offered for school committee members, parents, and the school system's management staff.

A testing committee comprised of administrative staff and chaired by the assistant superintendent for instruction monitors the program to determine its strengths and weaknesses, suggest changes, and screen tests to be used.

### SUGGESTIONS FOR IMPLEMENTATION:

1. Appoint a coordinator of testing who will build and carry out the testing program.
2. Establish a testing committee to monitor the testing program. Include representatives from pupil personnel services, elementary education, secondary education, curriculum and instruction, personnel, academic education, staff and management development, and the coordinator.
3. Provide a suitable location to house the Test Resource Center and the office of the coordinator.
4. Provide a wide range of educational opportunities to insure that testing is understood by those affected by it, including inservice courses for school staff, programs for students on test-taking skills, and assistance in helping staff select suitable test instruments.
5. Disseminate information concerning tests through newsletters, newspapers, radio, public appear-

ances before community groups, and through educational programs.

6. Continually review the operation of the testing program to determine ways to better serve student needs.

#### MATERIALS AND EQUIPMENT:

Space to house the Test Resource Center and the office of the coordinator of testing

Overhead projector and transparencies

Up-to-date editions of achievement, aptitude, and interest tests

Filing and display equipment for the Testing Resource Center

#### COST:

Materials and supplies (per year) \$30,000

Appraisal: High School

TITLE: Grade Nine Group Guidance Program
LOCATION: Wilmington High School, Wilmington, Massachusetts 01887
CONTACT PERSON: George Eisenberg, (617) 658-4463

#### OBJECTIVES:

1. To help students gain insight into their abilities and achievements.
2. To provide students with an introduction to the high school and to the expectations of parents, teachers, and other students.
3. To provide students with information about post-high school training.
4. To provide students with an opportunity to meet their counselors early in the school year.

#### DESCRIPTION:

Wilmington High School has developed a group guidance program for freshmen in which all incoming ninth graders are assigned one guidance session per week. These sessions are conducted by the high school counselors for groups of fifteen students. The first few sessions deal with questions, issues, and information about the high school, such as why get a diploma, how to study, differences between high school and junior high school, the functions of the guidance department, and an introduction to "key" people at the school. Much of this material is covered in general discussions using the student handbook, school curriculum guide, and various staff members from within the building.

As the students begin to ask questions and express themselves more freely within their respective groups, the discussions begin to focus more on personal abilities, aspirations, and previous achievements. Aptitude and achievement tests are discussed in general terms to provide students with an overview of the purpose and limitations of these instruments. Students then go over their individual cumulative folders to enable them to understand the significance of their test scores and other student record information, and begin to draw forth an accurate assessment of their strengths and weaknesses. Discussion then focuses on how the students can most constructively use this data to help themselves. A great deal of time is also spent discussing student-parent, student-teacher, and student-



student relationships. Part of this discussion deals with the expectations of each group toward the other and toward the school. Throughout the year role playing activities and films are used to implement the program and facilitate discussions. The program ends with students completing a self evaluation of how well they handled the current year and a preview of the next year.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. With the assistance of ninth graders, identify information which freshmen should know.
2. Guidance counselors should achieve a consensus on new issues to address in group sessions.
3. Schedule each student for weekly group guidance sessions with his or her own counselor if possible.
4. The counseling staff should meet on a weekly basis to discuss the progress of the groups.
5. Obtain feedback from students to insure that students' needs are being met.

#### MATERIALS AND EQUIPMENT:

School publications

Students' cumulative folders

Filmstrips

"Goofy Goes to Work"

Available through Walt Disney  
Education Media Company,  
500 South Buena Vista Street,  
Burbank, California 95210

#### COST:

Filmstrips      \$126

Appraisal: High School

TITLE: Ninth Grade Exploratory Program
LOCATION: Assabet Valley Regional Vocational School, Marlborough, Massachusetts 01752
CONTACT PERSON: Thomas King, (617) 485-9430

#### OBJECTIVES:

1. To help students understand their academic and vocational strengths and identify and correct their academic weaknesses.
2. To strengthen students' awareness of their interests and abilities.
3. To demonstrate to students the relationship between academic and vocational success.

#### DESCRIPTION:

The Assabet Valley Regional Vocational School utilizes an extensive appraisal system to help its students find a vocational area that is the most appropriate for their interests and abilities.

Each year four hundred ninth graders are accepted into the school from eighteen different junior high schools. Three male and three female counselors interview all applicants and review students' records including grades; attendance; test scores; and comments from parents, teachers, counselors, and administrators. This comprehensive evaluation focuses upon the positive qualities and uniqueness of each applicant.

The major emphasis during the ninth grade is for each student to discover his or her potential future in vocational education and to identify the factors which might be enhanced or eliminated to allow that individual to be successful.

Once students are selected into the school, they are administered math and reading tests early in the school year to obtain additional data to help assess their needs and to help ensure their proper course placement. A broad selection of academic courses permits students to design their own programs to match their abilities, interests, and future goals.

All students are guaranteed the opportunity to explore their first two choices of the nineteen trade areas available at the school. In addition, they

are required to take courses in four other trade areas. While most young men and women seek the occupations traditionally linked with members of their own sex, they are also placed in non-traditional experiences. Unless several youngsters of the same sex are assigned to the same areas, the student who is making a serious effort to explore the non-traditional area will not be successful. Thus, effort is made to ensure that students in non-traditional classes are in those classes with a support group of at least five other students of the same sex.

Late in the school year, after having explored a range of trade areas, all ninth graders are given a career interest survey to enable them to select tenth grade courses. As a result of the extensive exploratory experiences they have had, more than half of all ninth graders change from their initial career choice.

In order to maintain positive communication between home and school, every thirty school days the student and parents are mailed a progress report or a report card. Students and vocational teachers are expected to discuss these reports so that questions can be answered and habits, attitudes, or attendance affecting achievement can be changed. Each counselor is assigned to specific shops and works closely with the staff, meeting with them regularly to discuss individual student's progress. In addition, each student sees his or her counselor at least three times a year to discuss academic or personal concerns.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Review student record information on each ninth grade student to get an initial impression of the student's strengths, weaknesses, abilities, and interests.
2. Administer math and reading tests in September to help place students.
3. Establish a system for accepting students into shop areas. Considerations should include student choice, shop and academic grades, and attendance.
4. Provide for scheduling and shop offerings which encourage students to explore non-traditional shop areas.

5. Maintain a communication system that provides both students and parents with regular feedback on the student's progress.

#### MATERIALS AND EQUIPMENT:

Reading and math tests

Career interest inventories

#### COST:

Test materials        \$800





# REFERRAL

Referral should provide students and their families with access to a wide variety of services or resources not normally found in the classroom or school. There are two essential ingredients for an appropriate, effective referral: relevant and timely information about resources and agencies, and familiarity with or knowledge about the specific needs of the student and his or her family. The school district should develop a bank of information or have access to a network of resources and agencies which can help students and their families with problems that can affect the educational opportunities of the student. An impressive array of resources and agencies that provide psychotherapy, family counseling, drug and alcohol treatment, psychological testing, and alternative school settings is available in Massachusetts.

Trust, respect, and understanding among parents, students, and counselors are critical elements in the referral process. Moreover, the purpose of the referral, and the expectations of each party should be clarified prior to the placement.

Referral is an essential part of the counselor's role. However, referral should not be the termination of a relationship with the student and parents. The student and family should understand that further assistance is available should the circumstances or needs change. Furthermore, communication between the referral agency and the counselor should continue to insure that the school is a participant in, or at least informed about, any follow up.

The Brockton Public Schools developed a directory of community resources for all counselors in the system. Inservice meetings with agency and school staff insure close contact with all personnel. Referrals focus on prevention and support services rather than reaction to crises. Any staff member at Wilmington High School may request that a Pupil Study Team meeting be called to discuss a student's academic, social, or emotional problem. The team includes the guidance counselor and the student's teachers. After an initial team meeting the student and his or her parents are invited to attend subsequent meetings. At the Woodrow Wilson Elementary School, Framingham, students with school-related problems are referred from a mini-clinic in the school to an outside agency.

Referral: Elementary Through High School

TITLE: Outside Agency Referral Program  
LOCATION: Brockton Public Schools, Brockton,  
Massachusetts, 02401  
CONTACT PERSON: Carl Pitaro, (617) 580-7521

#### OBJECTIVES:

1. To provide students with access to a wide variety of human resource services not available in the standard school program.
2. To utilize the existing community agency framework to eliminate duplication of services and to better direct clients to the agency most appropriate for their needs.
3. To provide students with preventative as well as reactive services to a variety of academic, family, personal, and social problems.

#### DESCRIPTION:

The referral process at the Brockton Public Schools begins when a student demonstrates a need that cannot be met through the existing school program. Each counselor has a school-published directory of community resources which lists recreational, social, public health, mental health, rehabilitation, volunteer, hospital, service, and public assistance agencies. The counselor uses this directory to determine the appropriate referral and then discusses the possibility of such a referral with the student and his or her family. Many of these referrals are designed for prevention and support reasons and not solely to react to problem situations.

The student is provided with information about the agency, the telephone number, and the name of a contact person. The counselor meets with the student on a continuous basis after the student's first visit to the referral agency to insure that the referral is proceeding smoothly. The counselor is also responsive to the agency's requests for information about the referred student once the appropriate release forms have been signed. As treatment progresses, the counselor acts as a liaison with agency staff by assisting in developing a treatment program for the students as well as implementing the agency's recommendations in the school.

For the duration of the referral, the counselor

facilitates the process by making any necessary arrangements with the agency or agencies involved, coordinating the variety of services involved, and once the student stops treatment at the agency the counselor holds follow-up sessions with the student to ensure that the student's progress continues.

Inservice training and regular meetings between school and agency staff are foundations of the referral program. The inservice program informs counselors about the total resources in the community through presentations given by representatives of community agencies. The school system's psychologists and psychiatrists train counselors to make the most effective use of these agencies through appropriate referral procedures.

Monthly staff meetings are held to discuss individual problems, using a case study approach. Periodic meetings are held between staff and representatives of the social service agencies to maintain strong lines of communication. Agency representatives frequently come to school to do inservice presentations, to consult with school staff, and to provide direct services. For example, the Phaneuf Center for Alcohol and Drug Abuse comes on a weekly basis to consult with teachers and to provide treatment for youngsters. An especially strong contact is maintained with the probation department of the Brockton District Court. A counselor attends weekly juvenile pre-court conferences for youngsters in trouble.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Utilize any existing inter-agency framework as a basis for starting a referral program.
2. Obtain administrative approval and support for the referral program.
3. Establish meetings with both the administrative and non-administrative staffs of local social service agencies to explain the aims of the referral program and elicit support from the agencies. Use these meetings to learn specifics about the agencies' functions, services, and procedures.
4. On the basis of these meetings, compile a resource directory for future use in making referrals. Include the names of contact

persons, telephone numbers, addresses, and services provided by the agencies.

5. Establish a referral system that is the most efficient for each school district. Considerations in starting this system should include provisions for parent and student involvement, confidentiality, monitoring and evaluation processes, criteria for referral, and establishing a regular system of communication between the school and the agencies involved.
6. Establish regular meetings with agency personnel to better coordinate services and share observations regarding student progress.
7. Maintain a regular inservice program for school staff.

#### MATERIALS AND EQUIPMENT:

None

#### COST:

None

Referral: Elementary

TITLE: Framingham Youth Guidance Outreach Program
LOCATION: Woodrow Wilson Elementary School, Framingham, Massachusetts, 01701
CONTACT PERSON: David Starr, (617) 872-7885

#### OBJECTIVES:

1. To effectively coordinate referrals from a school-based program to an established mental health clinic program of clients who are having school related problems.
2. To encourage clinic and school social workers to support and complement each others' roles and responsibilities.

#### DESCRIPTION:

The Framingham Youth Guidance Outreach Program is a mental health outreach program which uses the local elementary school as a base for operation. All services are made available in the school environment to first through fifth grade students and their families who are eligible for Medicaid. One of the clinic workers serves as the administrator of the program.

The Framingham Youth Guidance Outreach Program offers diagnostic evaluations and individual and group treatment as well as family counseling in child rearing, family relationships, home management, and neighborhood living. Clinic social workers provide informal and formal consultation to school personnel about children being treated. An exchange of information occurs, varying from impromptu conversations in the school cafeteria between the worker and one or more school personnel to a more formally organized procedure for case presentations. School social workers make referrals and provide transitional support as clients work with the clinic staff.

This outreach program has been in existence for four years. It has been marked by a high degree of client follow-through, cooperation, and coordination between the school and clinic staffs, and by the active support of the school administration. The school contributes space, resources, and time, and a willingness to accept clinic workers into the school.



#### SUGGESTIONS FOR IMPLEMENTATION:

1. Approach a local clinic to request a clinic worker and offer space in the school and support from the school staff.
2. Establish roles, philosophy, methods, and communication networks between the school and clinic.
3. Designate a clinic worker to serve as the administrator of the clinic part of the program and a counselor as the coordinator of the school part of the program.
4. Assign mental health professionals to provide direct treatment to students in the school (with parental approval).
5. Enlist the services of volunteers and social work or psychology interns to provide a full range of services.
6. Determine criteria for referrals and a procedure to shift cases from the school workers to the clinic workers.
7. The school social worker should coordinate an initial contact between the clinic social worker and the child and his or her family.
8. Provide a mechanism for formal and informal staff consultation meetings.

#### MATERIAL AND EQUIPMENT:

A constant office space for a variety of therapy sessions.

#### COST:

None

Referral: High School

Title: Pupil Study Team LOCATION: Wilmington High School, Wilmington, Massachusetts, 01887 CONTACT PERSON: George Eisenberg, (617) 658-4463
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#### OBJECTIVES:

1. To utilize a decision-making process that involves all the teachers of a student who is having difficulty in school.
2. To systematically refer students in need of additional services.
3. To provide an alternative to special education services for students who are having difficulty.

#### DESCRIPTION:

At Wilmington High School, a Pupil Study Team meeting may be requested by any staff member who has difficulty reaching a student with an academic, social, and/or emotional problem. The Pupil Study Team is comprised of the guidance counselor and the teachers who have a particular student. The meeting is held at the end of the school day, three to five days after the initial request and after the student and his or her parents have been informed about it. The team is chaired by the student's guidance counselor, who encourages teachers to share data regarding the student's behavior, academic performance, relationships with others, test scores, and other relevant data, and make suggestions for teaching or program strategies. An oral and written summary of this meeting is shared with the participants and with the student involved. The student and his or her parents are invited to attend subsequent meetings of the team.

If it appears that a student needs psychological services, the system's psychologist will meet with the student, his or her parents, and Pupil Study Team to determine the depth of the problem. The psychologist, the principal, and appropriate building and/or special education personnel review specific case issues - severity of the problem, characteristics of the case, the length of therapy required, and the psychologist's caseload - to determine if a referral should be made to an outside agency. The psychologist and the principal determine the appropriate agency and authorize the referral. The psychologist becomes the liaison between the agency and the public school. In this capacity, the psychologist keeps the student's counselor informed

in order that appropriate supportive or program help can be provided.

Referral and liaison activities are accomplished by letters of agreement, written quarterly reports, feedback from agencies, on-site observations, and agency representation at special education evaluation and annual review meetings. In cases where outside agencies provide counseling services within local school buildings, these agencies provide regular feedback to the appropriate school counselor. The school counselor in turn keeps the principal and psychologist informed as to progress.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Establish with staff the need to share problems.
2. Have team of teachers develop a system for sharing problems.
3. Provide inservice training for staff on how to share problems.
4. Establish an advisory committee to formally provide feedback to the system.

#### MATERIALS AND EQUIPMENT:

None

#### COST:

None





## RECOMMENDATIONS TO SCHOOL DISTRICTS

This section illustrates ways in which schools have implemented the following recommendations stated in the guidance and counseling position paper:

1. School committees and superintendents are encouraged to appoint local guidance and counseling advisory committees -- composed of parents, teachers, students, administrators, and employers -- to assess at least annually and report publicly to the school committee on the five functions of guidance and counseling at both the elementary and secondary school levels.
2. School committees and superintendents are encouraged to appoint community career counseling resource committees to increase the utilization of community resource personnel from business, industry, labor, and agencies for educational and career counseling.
3. Superintendents and principals are encouraged to initiate and/or expand career exploratory programs at the elementary level and work experience/cooperative education programs at the secondary level.
4. Principals and counselors are encouraged to better utilize counselor time and talents by utilizing a wider range of counseling techniques, reviewing counselor assignments to see if greater efficiency can be achieved in using counselor resources, determining if the organization of guidance and counseling services promotes continuity and personalization of services for students and parents, and considering the use of paraprofessionals and clerical personnel for duties not requiring a certified counselor.

The Rockland Public Schools and Doherty High School in Worcester both have Guidance Advisory Councils that are involved in the evaluation and development of guidance and counseling services. B.I.C.E.P., Hyannis is an elementary project designed to assist teachers in integrating career education and career awareness into the classroom. The Happy Hollow Elementary School, Wayland utilizes a wide range of counseling techniques to provide a developmental guidance program to four hundred students. The guidance and counseling program at Belmont High School is built on a team approach which promotes maximum use of counselors' skills and interests and allows for greater concentration on services and programs provided to all students.

Finally, in the Brookline Public Schools guidance and counseling services are delivered through a comprehensive kindergarten through twelfth grade program which utilizes a variety of techniques such as behavioral contracting, small group work, individual counseling, and teaching.

## Recommendations to School Districts #4: Elementary Through High School

TITLE: Brookline Pupil Support Services  
Department of Guidance  
LOCATION: Brookline Public Schools  
Brookline, Massachusetts, 02146  
CONTACT PERSON: Anne Henderson, (617) 734-1111

### OBJECTIVES:

1. To prevent psychological crises through preventive counseling.
2. To provide developmental guidance at predictable academic transitions.
3. To coordinate multi-disciplinary teams of support specialists in special education evaluations.

### DESCRIPTION:

The guidance department is one of three components of Brookline's Pupil Support Services. Services are delivered through a comprehensive kindergarten through twelfth grade program which utilizes a variety of techniques such as behavioral contracting, small group work, individual counseling, and teaching. Recognizing that early intervention can diffuse a potential crisis, the guidance department focuses on prevention.

The elementary guidance counselor's primary function is to guide children and their parents through the elementary years by providing information and support on a range of issues. Counselors, therefore, teach career awareness to first and second graders, focusing on decision-making and the identification of interests and aptitudes. In addition, elementary school students are helped to overcome sex role stereotypic attitudes by examining traditional stereotypic views and non-traditional career alternatives. Considerable individual counseling takes place and group counseling is also utilized.

The elementary level guidance counselors also function as Pupil Support Services' on-site administrators for the special education process. In this role, they provide decentralized coordination of evaluations and monitoring of individual educational plans of special needs students.

Counselors at the junior high school level concentrate on helping students deal with the emotional stresses of early adolescence. Semester and year-long groups are offered, along with individual follow-up sessions to help students deal with issues such as interpersonal relationships, jealousy, stealing, sex, drugs, and family break-ups.

At the high school, two courses are offered which provide opportunities for counselors and students to address adolescent issues in a non-threatening manner. Specifically, several counselors teach an elective psychology course which deals with group dynamics, childhood, adolescence, adulthood, developmental cycles, death, and theories of personality. A major goal of the course is to teach students about the choices and responsibilities of parenting by dealing with all stages of development from birth to death. A "Psychology of Women" curriculum, taught by the chairperson of guidance at the high school, is available for juniors and seniors. This course addresses issues related to sex role identification, adolescent female sexuality, and life style choices for females.

In addition to preventive counseling, considerable attention is also paid to transitional periods in a student's life and to crisis situations. Transitional guidance services are typified by counselors' interviews of new students and their parents, interviews of kindergarten level students and their parents, eighth grade orientation courses taught by counselors, and college admission workshops led by high school counselors. Crisis intervention occurs when a counselor intervenes in a volatile situation and facilitates problem solving for the participants. Such intervention may occur between two students in conflict or between large faculty and/or student groups. Group work with students, faculty, and parents addressing adolescent issues is the most prevalent form of crisis intervention.

While specific courses may change from year to year, and the guidance curriculum at Brookline remains fluid, its developmental approach from kindergarten through to high school remains constant.



Recommendation to School Districts #1: Elementary  
Through High School

TITLE: Guidance Advisory Council  
LOCATION: Rockland Public Schools,  
Rockland, Massachusetts, 02376  
CONTACT PERSON: Joseph Waisgerber, (617) 871-0541

OBJECTIVES:

1. To provide a forum for students, school staff, and the community to be involved in the evaluation and development of system-wide guidance and counseling services.
2. To provide the school committee, superintendent, and community with an assessment of guidance and counseling services.
3. To provide a mechanism for applying the standards of the Massachusetts Board of Education's position paper on guidance and counseling services to current guidance and counseling practices.

DESCRIPTION:

The Guidance Advisory Council was established at the initiative of the Superintendent of Rockland Schools in the summer, 1978. The purpose of the council is to assess and report on the status of guidance and counseling services in the system.

The council met five times during the 1978-79 school year. At the initial council meeting, a chairperson was elected; goals were established, organizational matters were discussed, and copies of the Massachusetts Board of Education's position paper on guidance and counseling were distributed. Additional meetings were used to discuss in detail how each of the five major functions of guidance and counseling services outlined in the position paper are implemented in the Rockland School System.

The final product of this year's council was an assessment report which was submitted to the superintendent, school committee, and general public. In addition, plans for next year's council are being discussed.

SUGGESTIONS FOR IMPLEMENTATION:

1. Obtain superintendent support and school committee approval for a guidance advisory council.

2. Establish representation on the council. Members should include teachers from elementary, junior high, and high schools; a school committee member; a school administrator; parents; students; a counselor; and a guidance director.
3. Recruit members for the council. Utilize existing parent and student organizations as possible sources for volunteers. Publicize the opportunity through notices, newspapers, and announcements.
4. Establish the first meeting at a convenient location and time. Business at a first meeting should include the election of a chairperson, appointment of a secretary, establishment of goals and future meetings, and distribution of the Massachusetts Board of Education's position paper on guidance and counseling services.
5. Hold regular meetings to discuss the five major functions of guidance and counseling services. The guidance department should supply information and materials on current practices.
6. Submit a final council report to the school committee, superintendent, and general public.
7. The council should determine future goals for next year's council.

MATERIALS AND EQUIPMENT:

Copies of the Massachusetts Board of Education's position paper on guidance and counseling services.

Materials explaining current system-wide guidance and counseling practices.

COST:

None



### Recommendation to School Districts #3: Elementary School

TITLE: B.I.C.E.P. (Barnstable Instruction Career Education Program)  
LOCATION: Barnstable School System  
Hyannis, Massachusetts, 02601  
CONTACT PERSON: Patricia Duffy, (617) 771-1721

#### OBJECTIVES:

1. To develop techniques to integrate career education and career awareness into the elementary school classroom.
2. To help elementary school students understand work, family, personal, and social life situations.
3. To provide elementary school students with experiences and training in decision-making.
4. To help elementary school students develop a positive self-image.
5. To utilize community resources to enhance the student's knowledge of careers.

#### DESCRIPTION:

The Barnstable Instructional Career Education Program (Project B.I.C.E.P.) is an elementary school career awareness project funded by Title IV-C. Through curriculum development, staff development, information dissemination, and program evaluation, Project B.I.C.E.P. is developing models of curriculum and inservice training which can be utilized in other school systems.

To date, the B.I.C.E.P. Project Director, with the assistance of classroom teachers working as curriculum writers and field testers, and in conjunction with the Barnstable Director of Elementary Curriculum and Instruction, has developed a draft of B.I.C.E.P.'s curriculum model. The document is a collection of instructional activities focusing on self-awareness, interpersonal skills, attitudes toward work, decision-making, problem-solving, occupational information, and economic awareness. Each of the activities is cross-referenced by grade level and by subject area. Subject areas include language arts, social studies, mathematics, science, fine arts, and health and physical education. The B.I.C.E.P. curriculum model encourages

community involvement and utilizes resource people such as parents, the labor and business community, and retired citizens.

Staff development for Project B.I.C.E.P. is an ongoing series of activities and events in which teachers have the opportunity to explore career education concepts, materials, and techniques.

Information relating to Project B.I.C.E.P. is disseminated through (1) media devices such as newsletters, brochures, and manuals, (2) resources of the community, (3) the Barnstable Career Education Resource Center, and (4) the B.I.C.E.P. Community Advisory Council composed of school staff, parents, administrators, and community participants which meets on a monthly basis.

Program evaluation is accomplished through pre- and post-test instruments and interviews designed to measure the perception of students and teachers in their knowledge, attitudes, and behaviors toward career awareness. In addition, the effectiveness of the Career Education Resource Center is measured in terms of types of services rendered, number of services rendered, and the overall efficiency of the operation.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Design a project proposal that is in agreement with the school district in both philosophy and procedures for implementation.
2. Develop project goals, objectives, and methods for achieving goals.
3. Develop a cadre of personnel to implement the goals and objectives.
4. Provide inservice training to staff on career education concepts, techniques, and materials.
5. Provide opportunities for instructional materials to be developed which fall within the existing school priorities.
6. Gather resources from existing career education programs on the state and national level to research alternative ways of implementing a career awareness program.

7. Design methods to implement and evaluate instructional materials and inservice activities.
8. Develop methods for disseminating information to teachers, students, parents, administrators, and community members.
9. Establish a project advisory council to act as a liaison between the school and community.
10. Develop an evaluation process to assess the effectiveness of the program goals and objectives.
11. Plan for revision of materials and services, based on evaluative data.

\*Note: B.I.C.E.P. is funded through Title IV-C for one hundred percent of its first year cost and ninety percent of its second year cost. It will be funded for eighty percent, or if validated, ninety percent of its third year cost.

#### MATERIALS AND EQUIPMENT:

##### Curriculum

B.I.C.E.P. curriculum materials including:

- Curriculum guides
- Professional readings
- Guidance and counseling guides and programs
- Evaluation reports and resources
- Staff development and inservice resources
- Special groups - parents, community-resources
- Resource file of community volunteers
- Microfiche collection of programs and materials
- Multimedia resources

A catalog of resources, the B.I.C.E.P. curriculum, and B.I.C.E.P. inservice resources model are available through Patricia Duffy, Barnstable School System, Hyannis, Massachusetts.

##### Camera

Slide projector and screen

#### COST\*:

Print material	\$500
Non-print material	400
Printing and duplication of materials	1,500
Consultant services	8,000



Recommendation to School Districts #4: Elementary School

TITLE: Comprehensive Guidance Program  
LOCATION: Happy Hollow Elementary School  
Wayland, Massachusetts, 01778  
CONTACT PERSON: Maria Duggan, (617) 358-7177

OBJECTIVES:

1. To help students:
  - (a) realize their educational and personal potential,
  - (b) develop the capacity for making responsible decisions,
  - (c) gain self-awareness and self-esteem.
2. To make counseling a shared responsibility within the school community.

DESCRIPTION:

For six years, a developmental guidance program has been offered to four hundred students at the Happy Hollow School. The counselor serves as a catalyst, working cooperatively with and coordinating the efforts of administrators, teachers, parents, graduate school interns, high school and sixth grade students, and community resource people to provide a comprehensive guidance program. The counselor develops the master schedule of guidance activities; provides training and supervision for the paraprofessional staff; consults with the principal, special needs staff, and teachers; communicates with parents; and engages in the evaluation of activities. In addition, the counselor co-leads several student and parent groups and provides individual counseling to many students. Youngsters are often referred by the counselor to community agencies if outside help is indicated.

Others participate in the delivery of guidance services in a number of ways. Specifically, school staff co-lead groups with the counselor. For example, the principal has run a confidence building club, in which he worked with girls and boys on model building. Sixth grade teachers work with the counselor on a "special friends" program, where upper grade students are matched with lower grade students for the purpose of academic assistance and discussing concerns. Classroom teachers use many human development and career awareness curricula, such as "Developing Understanding of Self and Others", "Magic Circle", values clarification, and Massachusetts Educational Television programs to work with total classes and small groups.

High school students take a seminar entitled "Experiences in Teaching" for credit. This provides them with teaching, counseling, and parenting skills. They are placed in elementary classrooms to work as teachers' helpers and to provide peer counseling to students who could benefit from a teenage role model.

Parents co-lead activity groups. These groups are designed to help students develop interpersonal skills and self-confidence. In one group, parents help to make doll house furniture. Parents also participate in daytime student and parent groups and evening parent groups led by the counselor. They provide assistance with the planning of these groups.

Guests from the community attend a career day at school and come into the classrooms throughout the year to discuss their careers and the factors that influence their career choice. Students receive exposure to non-stereotyped vocations through contact with adults whose occupations represent a change in traditional sex role stereotypes. After the presentations, students are given the opportunity to discuss the experience.

Finally, graduate students work in conjunction with the counselor. They co-lead parent and student groups with other staff members and assist the counselor in implementing other aspects of the guidance program.

SUGGESTIONS FOR IMPLEMENTATION:

1. At the start of the school year plan and develop a guidance program in relation to the needs of pupils.
2. Meet with staff, paraprofessionals, and volunteers to help them to identify their skills and strengths.
3. Make guidance materials and assistance available to teachers.
4. Schedule students individually or in groups for personal counseling.
5. Offer a seminar for sixth grade students on responsibilities and approaches to working with younger students.



6. Meet with high school students to plan their classroom assignments.
7. Meet weekly with staff and parent volunteers to plan, assist with, and evaluate programs.
8. Provide weekly supervision to paraprofessionals and volunteers.
9. Evaluate aspects of the guidance program on an ongoing basis with students, teachers, and administrative resource people.

#### MATERIALS AND ACTIVITIES:

##### Curriculum Models

Magic Circle, Human Development Program  
Available through Human Development  
Training Institute, P.O. Box 1505,  
La Mesa, California, 92041

Developing Understanding of Self and Others  
Available through American Guidance  
Service, Incorporated, Publishers  
Building, Circle Pines, Minnesota,  
55104

Play therapy materials

Slide projector and screen

Film projector

Tape recorder

Television

#### COST:

<u>Magic Circle activity guide and teacher's manual</u>	\$18
<u>Developing Understanding of Self and Others kit and storybooks</u>	90
Play therapy materials	100
Professional development	50

#### Recommendation to School Districts #4: High School

<p>TITLE: Belmont High School Guidance Department LOCATION: Belmont, Massachusetts, 02178 CONTACT PERSON: Donald Weintraub, (617) 484-4700 Bill Brogna, (617) 489-2691</p>
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#### OBJECTIVES:

1. To provide more personal counseling to students.
2. To maximize use of counselors' skills and interests.
3. To encourage group guidance and counseling.
4. To provide more opportunities for parental contacts.
5. To develop more effective guidance programs within the classroom.

#### DESCRIPTION:

The guidance and counseling program at Belmont High School is built on a team approach which allows for greater concentration on those services and programs vital to all students.

Six counselors are equally divided into two teams, A and B. Team A works with freshmen and sophomores while team B focuses on juniors and seniors. Students change counselors after grade ten and the counseling load is divided alphabetically so that each counselor on team A feeds directly to a counselor on team B. If a student has established a particularly strong relationship with his or her counselor in the first two years, then as a junior the student will have a new official counselor but may maintain contact with the team A counselor.

By concentrating on specific grade levels, the teams can focus on issues and activities of interest for their group as well as devote additional time to developing more effective programs via classroom activities. For example, guidance counselors team-teach with sophomore English teachers on career awareness.

Team activities are coordinated by the the head counselor. Inservice training is available to counselors and teachers on career transition skills, child abuse, group processes, and innovative group techniques. In addition, counselors also receive training from community agencies.

The team approach also facilitates more effective lines of communication between counselors and teachers. Since teachers are generally involved with either juniors and seniors or with freshmen and sophomores, counselors and teachers now work with the same student populations. Thus, counselors have fewer teachers to collaborate with and can therefore devote more time to each individual teacher.

This new organizational structure has increased parent involvement in the form of a parent advisory board, a volunteer parents group, and specific activities aimed at parents.

In general, the division of counselor commitments and responsibilities to specific grade groups allows for more specialization which maximizes services to students, staff and parents by utilizing the counselor's professional training and expertise.

Each team has specific areas of responsibility. Team A works with grades nine and ten and is responsible for the freshman orientation program; ongoing counseling groups on issues such as decision-making, school adjustment, and values clarification; the sophomore career awareness program; individual counseling; parents' nights on orientation to high school guidance services for freshmen; parents' nights on future planning, career awareness, and school adjustment for sophomores; the Career Resource Center operation; career exploration field trips for sophomores; a career planning course; and publicity for freshman and sophomore guidance events.

Team B works with grades eleven and twelve and is responsible for senior group guidance workshops on career planning, financial aid, testing, interviewing skills; ongoing issues workshops; individual counseling; junior group guidance workshops on self-assessment and future planning; parents' nights on financial aid, and college board testing; junior and senior parents' nights; field trips to visit colleges and potential sources for employment; and a junior and senior planning course.

#### SUGGESTIONS FOR IMPLEMENTATION:

1. Develop a needs assessment on guidance and counseling services to determine strengths and weaknesses of the program.
2. Disseminate the needs assessment to parents, students, and staff.
3. Create an advisory group and subcommittees comprised of parents and counselors to explore those areas indicated by the needs assessment to be problems.
4. The advisory group and subcommittees should more clearly define and delineate problems and submit their analysis to the guidance director and school administration.
5. Alternative organizational structures which will resolve the problems should be explored.
6. Contact other school systems in Massachusetts and neighboring states to get information on suggested alternative organizational structure.
7. Share recommended structure with guidance staff and solicit their support.
8. Share recommended structure with school committee and solicit their approval.
9. Distribute a notice to parents and teachers explaining the new structure and the rationale for adopting it.
10. Evaluate new structure after a two year trial period.

#### MATERIALS:

No materials directly related to the new structure.

#### COST:

No costs directly related to the new structure.

- Recommendation to School Districts #1: High School

TITLE: Guidance Advisory Council  
LOCATION: Doherty Memorial High School  
Worcester, Massachusetts, 01602  
CONTACT PERSON: Robert McGinn, (617) 791-8796

OBJECTIVES:

1. To evaluate and make recommendations about the services of the guidance department.
2. To increase community awareness about guidance services.

DESCRIPTION:

The Guidance Advisory Council was formed three years ago at Doherty Memorial High School to study and make recommendations about the services of the guidance department. The council, which is comprised of three teachers, twelve parents, three students, one administrator, one school committee representative, and the head counselor, meets during the school day for an hour and a half every three weeks. Chaired by a member elected by the group, the council focuses on topics solicited by its members and by other interested students, staff, and parents. As a result of council involvement last year, a new school profile was designed, the quantity and quality of guidance services for sophomores were improved, and the need for clearer and stronger lines of communication between school staff and the school administration was identified.

While primarily a forum for the study of guidance department effectiveness, the council also serves as an advocate for guidance and counseling services to the school administration and is a source of committed individuals for volunteer school projects.

Through participation on the council, members gain a better understanding of the guidance department. Conversely, the guidance staff has become more aware of, and more responsive to, the needs of students and parents.

SUGGESTIONS FOR IMPLEMENTATION:

1. Send a letter to parents asking for their participation on the advisory council.

Include the rationale for the council; time commitment; contact person; and the date, time, and location of an initial meeting.

2. Recruit, or have the student body elect, three or four students who are free to attend the meetings during the school day and who would be willing to actively participate in the group.
3. At the first council meeting, help the group establish goals, set a time for future meetings, and elect a chairperson.
4. Share the notes of the council meetings with other guidance staff members and school administrators who did not attend the meeting.
5. Establish a vehicle for communicating council decisions to the school administrators.

MATERIALS AND EQUIPMENT:

None

COSTS:

Postage	\$10
Duplication of Materials	10





## Appendix

This appendix categorizes all programs listed in this handbook by the five guidance and counseling functions discussed in the Massachusetts Board of Education's position paper on guidance and counseling services: (1) personal counseling, (2) educational and career counseling, (3) consultation, (4) appraisal, and (5) referral. Since many programs provide services which fall under more than one of the functions, some are listed more than once, with the primary function indicated by an asterisk. The appendix provides a capsule description of the program, the grade level it serves ("E" for elementary school, "J" for junior high school, and "H" for high school), and where to find it in the handbook.

PERSONAL COUNSELING

Name of Program	School	Level	Overview	Page
B.I.C.E.P.	Barnstable High School Hyannis	E	A career curriculum stressing problem-solving and decision-making skills is available to all students.	54
Bilingual Course*	Harrington Elementary School, Cambridge	E	Portuguese bilingual students are helped to adjust to a new country, culture, and school.	5
CASPAR Alcohol Education Program*	Somerville	E-J-H	Alcohol education is offered in the classroom. High school students are trained to provide alcohol information to peers.	4
Comprehensive Guidance Program	Happy Hollow Elementary School, Wayland	E	Counseling services are aimed at improving students' self-image, decision-making skills, and interpersonal relations.	56
Contemporary Life Awareness Series*	Nashoba Regional High School, Bolton	H	Informational programs focus on social and mental health issues.	11
Framingham Youth Guidance Outreach Program	Woodrow Wilson Elementary School, Framingham	E	Outreach counseling services are available for elementary school students.	47
Grade Nine Group Guidance Program	Wilmington High School Wilmington	H	Students increase their awareness of their abilities, interests, and personal values.	41
Group Counseling for Children with Split Families*	McCarthy-Towne Elementary School, Acton	E	Children from split families meet weekly for group counseling.	6
Growing and Changing*	Newton Elementary Schools, Newton	E	Sex education and information to improve decision-making skills and to expand self-awareness are incorporated into the classroom curriculum.	7
Guidance for 7th and 8th Graders	Paxton Center School, Paxton	J	Students increase their awareness of their interests, aptitudes, and personal values.	17
Helping the New Child in School*	Wildwood Elementary School, Amherst	E	Students entering a new school are helped to adjust to a new environment.	8
Human Development Program*	Estabrook Elementary School, Lexington	E	Personal counseling sessions are aimed at school adjustment.	9
Open	Ipswich High School, Ipswich	H	A personalized education program is offered to potential dropout students.	23

\*Personal counseling is the program's primary function.



Personal Counseling (continued)

Name of Program	School	Level	Overview	Page
Outward Bound*	Bowman Elementary School, Lexington	E	Group cooperation and individual self-confidence is fostered through this outdoor program.	10
Peer Counseling	Dover-Sherborn High School, Dover	H	Students are trained to counsel other students.	37
Project Potential	Attleboro High School, Attleboro	J-H	Students are helped to adapt to personal, social, and career changes.	34
The Self-Image Program*	Dutile Elementary School, N. Billerica	E	Fifth graders serve as role models to younger students.	10
Upstart	Weeks Junior High School, Newton	J	Career experiences and personal counseling services are provided to eighth and ninth graders.	21

\*Personal counseling is the program's primary function.

# EDUCATIONAL AND CAREER COUNSELING

Name of Program	School	Level	Overview	Page
B.I.C.E.P.*	Barnstable High School, Hyannis	E	Students identify personal skills and are provided with career information and "hands-on" career experiences.	54
Boys and Girls English*	Bowen Elementary School, Newton	E	Career exploration program is offered which helps students overcome sex role stereotyped attitudes.	15
Career Education*	Foxborough High School, Foxborough	H	School, home, and community components are incorporated into a career education program.	23
Career Guidance Resource Center*	Newton North High School, Newton	H	Students are provided with a wide variety of career development experiences.	24
Career Research Partnership Workshop	Wellesley Senior High School, Wellesley	H	"Shadowing" experiences and self-awareness workshops help students make career choices.	36
Comprehensive Guidance Program	Happy Hollow Elementary School, Wayland	E	Community resource people are utilized to promote career awareness.	56
Experience School Program*	Pittsfield High School, Pittsfield	H	Career internship projects offer "hands-on" experiences for students.	26
Exploring Careers and Social Services*	Classical High School, Springfield	H	Guest speakers from psychology-related agencies supply information on educational and career opportunities.	27
Guidance for seventh and eighth graders*	Paxton Center School, Paxton	J	All students are involved in weekly guidance sessions aimed at career development.	17
Harwich Career Education*	Harwich Junior High School, Harwich	J	This career education program involves community resources and includes "shadowing" experiences.	16
Ninth Grade Exploratory Program	Assabet Valley Regional Vocational School, Marlborough	H	Students identify personal skills and values and begin to establish their individual goals.	42
Project OPEN*	Ipswich High School, Ipswich	H	Potential dropouts are encouraged to complete high school through an alternative program.	28
Project MORE*	Palmer Public Schools, Palmer	J	Career education is provided through a program initiated by the superintendent of schools.	19
Project Potential	Attleboro High School, Attleboro	J-H	Decision-making and self-awareness are developed in students to help them with educational and career goals.	34
Upstart*	Weeks Junior High School, Newton	J	Eighth and ninth graders experience career exploration.	21

\* Educational and career counseling is the program's primary function.

## CONSULTATION

Name of Program	School	Level	Overview	Page
Career Research Partnership Workshop*	Wellesley Senior High School, Wellesley	H	Teachers are assisted in relating careers to their disciplines through "shadowing" and workshop experiences.	36
CASPAR Alcohol Education Program	Somerville	E-J-H	Teachers are trained to develop and implement alcohol curriculum and students are trained as peer leaders.	4
Contemporary Life Awareness Series	Nashoba Regional High School, Bolton	H	Based on counseling sessions with students, counselors provide consultation to faculty members.	11
Human Development Program	Estabrook Elementary School, Lexington	E	Consultation is provided to parents and school staff during and upon completion of personal counseling sessions.	9
Parent Training Course*	Harwich Elementary and Intermediate Schools, Harwich	E-J	Parents are assisted with child management and communication skills.	33
Peer Counseling*	Dover-Sherborn High School, Dover	H	Counselors train students to counsel other students with personal problems.	37
Project Potential*	Attleboro High School, Attleboro	J-H	Staff members integrate career awareness into their class curriculum and teach decision-making, values clarification and goal setting skills to students.	34
Teacher Training Program in Improving Children's Behavior*	Stoneham Public Schools, Stoneham	E-J-H	A training program is offered to school personnel to improve students' behavior.	32
Upstart	Weeks Junior High School, Newton	J	Career exploration experiences use school personnel and community individuals to assist students.	21

\* Consultation is the program's primary function.



# APPRAISAL

Name of Program	School	Level	Overview	Page
Grade Nine Group Guidance Program*	Wilmington High School, Wilmington	H	Students are helped through group guidance sessions to gain insight into their abilities and achievements.	41
Guidance Advisory Council	Doherty Memorial High School, Worcester	H	A broad-based advisory council studies and makes recommendations to the guidance department.	59
Guidance Advisory Council	Rockland Public Schools, Rockland	E-J-H	A broad-based advisory council provides the school committee, superintendent, and community with an assessment of guidance and counseling services.	53
Ninth Grade Exploratory Program*	Assabet Valley Regional Vocational School, Marlborough	H	Students are helped to examine their academic and vocational abilities in relation to future goals.	42
Test Program of the Quincy Public Schools*	Quincy Public Schools, Support Service Center, Quincy	E-J-H	Students are provided with appropriate and unbiased testing materials from a test resource center.	40

\* Appraisal is the program's primary function.

REFERRAL

Name of Program	School	Level	Overview	Page
CASPAR Alcohol Education Program	Somerville	E-J-H	Students with alcohol-related problems are referred to appropriate agencies.	4
Comprehensive Guidance Program	Happy Hollow Elementary School, Wayland	E	Out-of-school agencies are utilized in dealing with student problems.	56
Contemporary Life Awareness Series	Nashoba Regional High School, Bolton	H	Based on counseling sessions with students, counselors make referrals to appropriate agencies.	11
Exploring Careers and Social Services	Classical High School, Springfield	H	This classroom project provides students with access to a wide variety of information sources.	27
Framingham Youth Guidance Outreach Program*	Woodrow Wilson Elementary School, Framingham	E	Referrals are made from a mini-clinic in the school to the Framingham Youth Guidance Center.	47
Outside Agency Referral Program*	Brockton Public Schools, Brockton	E-J-H	A wide variety of community agencies are utilized in dealing with student problems.	46
Project Potential	Attleboro High School, Attleboro	J-H	Students interact with members of the community in on-site experiences.	34
Pupil Study Team*	Wilmington High School, Wilmington	H	Based on input from a pupil study team, a school psychologist, special education staff member, or the director of special education, students are referred to appropriate agencies	48
Upstart	Weeks Junior High School, Newton	J	Community resources are utilized in a career exploration program.	21

\* Referral is the program's primary function.

# RECOMMENDATIONS TO SCHOOL DISTRICTS

Name of Program	School	Level	Overview	Page
Belmont High School Guidance Department	Belmont High School, Belmont	H	Counselors specialize to better serve the needs of students, parents, and other faculty.	57
B.I.C.E.P.	Barnstable School System, Hyannis	E	An elementary school career awareness project develops models of curriculum and inservice training.	54
Brookline Pupil Support Services, Department of Guidance	Brookline Public Schools, Brookline	E-J-H	Guidance and counseling services are organized to promote continuity and personalization of services for students.	52
Comprehensive Guidance Program	Happy Hollow Elementary School, Wayland	E	The school counselor utilizes a wide range of counseling techniques.	56
Guidance Advisory Council	Doherty High School, Worcester	H	A Guidance Advisory Council is involved in the evaluation and development of high school guidance and counseling services.	59
Guidance Advisory Council	Rockland Public Schools, Rockland	E-J-H	A Guidance Advisory Council is involved in the evaluation and development of system-wide guidance and counseling services.	53



For more information, contact the Massachusetts Dissemination Project or one of the regional education centers listed below:

Charles Radlo  
Central Massachusetts Regional Center  
Beaman Street, Route 140  
West Boylston, MA 01583 (617) 835-6267

Paul Francis  
Southeast Regional Center  
Lakeville State Hospital  
P.O. Box 29  
Lakeville, MA 02346 (617) 947-3240

Don Geer  
Pittsfield Regional Center  
188 South Street  
Pittsfield, MA 01201 (413) 499-0745

Maria Grasso  
Northeast Regional Center  
Hathorne Avenue  
Hathorne, MA 01937 (617) 777-3500, 3501, 3502

Barbara Ramsdell  
Greater Boston Regional Center  
54 Rindge Avenue Extension  
Cambridge, MA 02140 (617) 547-7472

Jeannette Harris  
Springfield Regional Center  
155 Maple Street  
Springfield, MA (413) 739-7271

## Resources For Schools...



### **MASSACHUSETTS DISSEMINATION PROJECT**

Massachusetts Department of Education  
31 Saint James Avenue  
Boston, Massachusetts 02116

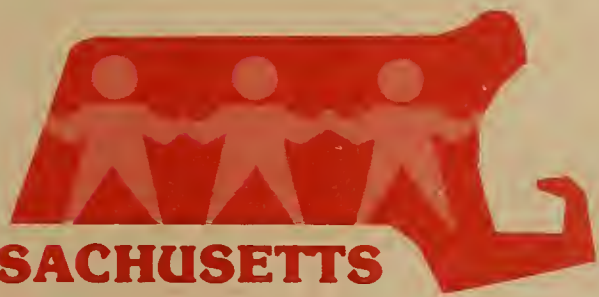
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# RESOURCES FOR SCHOOLS

MASSACHUSETTS  
DEPARTMENT  
OF EDUCATION

## 12. OPTIONS IN ENVIRONMENTAL EDUCATION



MASSACHUSETTS  
DISSEMINATION  
PROJECT

FALL 1979



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## 12. OPTIONS IN ENVIRONMENTAL EDUCATION

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*RESOURCES FOR SCHOOLS* is a series of publications developed by the Massachusetts Dissemination Project (MDP) for Massachusetts educators, parents, and students. The project, funded by the National Institute of Education, has four major goals:

- to stimulate greater awareness of the resources available to Massachusetts schools;
- to provide educators, parents, and students with specific information about resources and materials for school programs and services;
- to assist regional education centers and the Department in increasing and improving information services to educators, parents, and students in the state;
- to encourage greater exchange and sharing of resources among educational organizations, service providers, the Department of Education and its regional education centers, and school personnel.

The project is located in the Department's Boston office. In addition, each regional center has designated a staff member who maintains continuous contact and involvement with project activities across the state, and is responsible for working with center staff to improve information and dissemination services in the center. Ultimately, the regional centers will function as switchboards--sometimes providing services directly to schools, other times connecting them with the many existing resources. The development of this series--as its name suggests-- is one way the project is helping make these connections. *Please contact a member of the project staff for more information about the series, the project, or the regional center nearest you.*

*RESOURCES FOR SCHOOLS* presently available:

1. *A CATALOG OF PUBLICATIONS FROM THE MASSACHUSETTS DEPARTMENT OF EDUCATION* (being revised)
2. *VIDEO TAPES FOR TEACHING* (being revised)
3. *A GUIDE TO DISSEMINATION AGENCIES* (being revised)
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5. *THE STUDENT'S GUIDE TO SPECIAL EDUCATION* (being revised)
6. *IMPLEMENTING CHAPTER 622: EXEMPLARY PROGRAMS FOR ALLEVIATING RACISM AND SEXISM IN MASSACHUSETTS SCHOOLS*
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*RESOURCES FOR SCHOOLS* topics to look for in the future:

- student rights and responsibilities
- community education
- related educational organizations
- sex equity training strategies



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## ACKNOWLEDGMENTS

*OPTIONS IN ENVIRONMENTAL EDUCATION* is a book mostly about people and places. The people tend to be hard working, independent, committed, and giving. In many ways this is not my book at all, it is theirs. They are out doing the work, trying things, refining, struggling to come up with the best teaching methods. They are teachers in the best sense of the word. I learned an enormous amount from everyone I met during my search for environmental education in Massachusetts, and I owe all of them a great debt. They took time out from teaching their classes to teach me. To all of these people, I offer this small exploration of the world you work in and to which you dedicate yourselves. This is your book.

Nothing could have been accomplished on this book without the patient help and advice of the staff of the Massachusetts Dissemination Project, and to Judith Dortz and Cecilia DiBella of the Massachusetts Department of Education I owe the opportunity to try this at all. Their faith and aid have been instrumental in getting the publication finished. The contents have been the gift of many people who accepted my pestering questions, and without them there would be no book. Whatever is valuable in *OPTIONS IN ENVIRONMENTAL EDUCATION* I owe to all those mentioned above. Its faults are entirely my own.

J. Tevere MacFadyen  
Summer 1979





# I

## ENVIRONMENTAL EDUCATION: AN OVERVIEW

*"On the contrary, it is words that are vague. The reason why the thing can't be expressed is that it's too definite for language."*

C.S. Lewis, Perelandra

This is a book about environmental education (EE) in Massachusetts schools during the late 1970's, almost a decade after Earth Day turned ecology from an academic discipline into a household word. The advent of the ecology movement prompted educators to leap into an apparent void with new and different ideas that came to be collectively known as environmental education. The world has changed considerably in the past nine years, and so have our schools, but environmental education in some form seems well entrenched. What has happened to the offspring of Earth Day? What does the second generation of environmental education look like? As the pressure on our limited natural resources grows, how is the educational community handling its responsibility to prepare a population to live?

This book is one attempt to provide some possible answers to these questions. It focuses on the variety of environmental experiences offered to Massachusetts students and the creative and unusual methods practitioners have developed of teaching environmentally. *OPTIONS IN ENVIRONMENTAL EDUCATION* explores the blending of people and surroundings into a community...for that is what environmental education is all about.

What exactly is environmental education? Ask environmental educators that question and you will get a lot of different answers. Teaching environmentally demands dedication and intuition, a willingness to draw upon many diverse sources, combining and contrasting. It requires that the teacher step into the realm of the uncertain. When you are studying the relationships of living and non-living things in communities there just is not much you can bank on as absolute fact, so the teacher must be prepared to not know the answers on occasion. This is not because the teacher is poorly prepared, only that there are no answers, just better questions. Risk-taking and questioning are essential to educating environmentally on any subject.

Environmental education is sixth graders who adopt the identities of long-deceased residents of Waterbridge and play a computer game in which their characters' lives roll off the rattling teletype in fine detail. What happens when the town builds a new road and the tanner's

trade expands? What happens to the stream beside the tannery, and to the farmer down stream when the water sours? Who wins and who loses, and how does the community change when the environment is manipulated?

Environmental education is high schoolers from a small city excited enough by a summer environmental project to start an extracurricular organization that investigates and researches community ecological issues. Convinced that the data they have collected indicates dangerous industrial pollution of a local river, and angry that the government agencies charged with regulating pollution have ignored the evidence, the students return to the mill they most suspect. Eventually they narrow down the worst offense not only to a specific factory, but to a single drainpipe at a certain time each day. They then call the agencies again and tell them exactly when and where the illegal discharge occurs. The mill installs anti-pollution equipment.

Environmental education is a school administrator who is concerned that students do not have enough personal challenge, outdoor experience, and the special kind of growth that comes of having taken risks. With like-minded teachers he wants to apply the Outward Bound concept throughout a student's school life. The efforts they make to integrate some of these concepts into the curriculum attract both teachers and students, and what starts as a small home grown project evolves into a nationally validated program and, curriculum development project.

Environmental education is junior high students who serve as crew members on a sixty-five foot commercial fishing and research vessel. They set and haul lobster traps. They drag an otter trawl, then identify the contents. They try modern equipment as well as the long lines, and baited hooks used by the Portuguese dorymen who brought commercial fishing to this coast. At the day's end they mop down the boat, stow the gear, and clean the catch. Some fish are preserved in formaldehyde, but many students return home with specimens that are preserved, briefly, with butter in a hot oven.

Any subject can be taught environmentally. The notion that environmental education is a body of facts, a discipline, is one of the most misleading and frustrating aspects of environmental education. Ecology is a subject. Environmental education is an approach. The two have much in common, but they are not the same. This erroneous notion is an obstacle in the path of everyone who wants to build an environmental outlook into education, not add it on like an "extra" frill. Unfortunately the words environmental education seem to have a magical power. They scare people. Teachers and administrators perfectly capable of teaching environmentally somehow feel they must be missing some mysterious training, or hardware, or



that the location of their school is not correct.

Environmental education is not ecological sciences. Some of the most valuable uses of the environment in teaching have nothing at all to do with science. Most environmental education programs do involve some study of scientific education method, mainly because science is a handy tool for studying communities. The analytic and yet general attitude that a scientist must adopt is useful, but environmental education need not be scientific. There is no reason why ecology, biology, meteorology, or any of the earth and ocean sciences should not be a big part of an environmental education curriculum, but there is no reason why they have to be either. In trying to figure out what makes education environmental, it helps to disentangle what environmental education is, from what it is not.

Another erroneous but widespread assumption is that environmental education means just field trips, expeditions, or outside projects. These activities certainly are a great attraction for students but environmental education can take place inside the classroom. You do not need sylvan woods and fields surrounding the school to provide an environmental education. The concepts central to learning how the pieces of a community interact, and why, are best learned by starting close to home and studying your own community. This can happen anywhere.

As soon as you accept the proposition that an environment is any community available for study, then studying communities simply becomes a matter of applying yourself to something close at hand. A frequent comment is that schools have no time or money for environmental education anymore. With declining enrollment, shrinking budgets, and concern about a return to the basics, schools do not feel justified in adding a new subject. But this is precisely the finest argument in favor of environmental education. Reading, writing, and arithmetic can certainly be taught with environmental methods, not to mention research methods for science and social science and less tangible things like ethics, citizenship, responsibility, and maturity. An environmental approach is unequalled as a means of transmitting basic facts in a relevant, concrete manner, providing students with the broadest of educational opportunities. Done well, it would be hard to imagine an environmentally taught discipline not expanding a student's experience while conserving limited school funds.

There is no simple definition. Environmental education is learning about the world we live in as it actually operates, and like the world, it refuses to be simplified, and neatly categorized into boxes. No matter how narrow the focus at the start, by thinking holistically or environmentally you will end up with more and more ramifications. That is the nature of

environments, and the essential lesson of environmental education: All things are connected to each other, and to you!

How do you illustrate this fact for children? Try asking a simple question. What happens when you flush a toilet? Simple, you say. The waste water washes down the drain. But to where? Into the septic system. Then where? Into the leaching field or treatment plant. Then where? Into a river, or ocean, or ground water aquifer. (If you've gotten this far you are doing well.) Then where? It evaporates off the surface of the ocean, or lake or whatever, forms clouds, condenses and falls back to the ground. This pursuit of the elusive flushed toilet will take you through pipes and wells, reservoirs and rivers, and eventually it will take you right back to the tank.

What really happens when you flush a toilet is that you fill the toilet back up. In a very direct sense, the water you flush out of it will return sometime to fill the bowl again. What you are dealing with here is cycles, and the interconnectedness of all things. When you undertake to discover what happens when you flush a toilet you can encounter the entire range of learning experiences addressed in basic education.

When you teach environmentally you look for the connections between things, incorporating parts of the surrounding community which will add life to the central subject under consideration. Often this can be done by looking more closely at something easily ignored or so obvious that we rarely take the time to examine it. Like flushing a toilet. For one science teacher in a high school the focus was weather. He enjoyed teaching weather patterns and forecasting because not only did the work cover several basic sciences but, "that way we have them in class a day. A kid looks up and sees a cloud, he knows what sort of cloud it is and what weather it is likely to bring. He is in my class then, and forty years later he will remember that class whenever he recognizes a weather pattern."

This lasting, grounded knowledge is one of the great benefits of environmental education. A student who learns to read the weather, or one who discovers how to write while telling a very personal and important story of his own experience halfway up a rock he is climbing, or one who masters water chemistry to determine specific pollution in his own town, is unlikely to let this education slip away. Giving kids a way to understand the world around them produces unmistakable pride and commitment. This may be why environmental education is so often successful with students who have difficulty with traditional approaches.

Not everything a student must learn will be



pleasant or exciting, but bringing in aspects of the student's own world will help. This raises a caveat: avoid the exotic. If you have a choice between exploring the schoolyard and watching a film of a volcano erupting on a Pacific atoll, stay in the schoolyard. Stick with the local, the immediate, and real. The commitment to locally based work probably accounts for why so few environmental programs use prepared texts of any sort.

Environmental education is many things to many people and this has some unfortunate implications. Because most programs are begun by teachers, mostly on their own time, they have a real stake in the health and longevity of their efforts. This demands much time and energy which limits communication among practitioners and stifles the growth born of contact among committed and experienced people.

Probably more dangerous, though, is what the lack of communication does to those who may be just considering a venture into environmental education. We have already seen that the field suffers from an image as something exotic, esoteric, expensive, and special. This can be compounded by the fact that the very people who are in a position to counter this misinformation are too busy to share their expertise. *OPTIONS IN ENVIRONMENTAL EDUCATION* is an attempt to alleviate this problem by providing both new and experienced people with a buffet of environmental programs.

The largest portion of this book consists of a series of PROFILES, thumbnail portraits of people and places. Because programs must be locally oriented, and no two situations or locations will be identical, an attempt is made to avoid the impression that a program can be transplanted intact from one place to another. Instead, we do suggest possible solutions to one school's problem by showing what other schools have done. For instance, if an agriculturally based project in the western part of the state earns its keep by selling flowers and produce within the school, then perhaps a marine fisheries effort on the coast might employ similar devices.

This book does not intend to single out a few programs to the detriment of others. On the contrary, profile subjects were chosen for their illustrative value. This is admittedly a subjective decision, and not meant in any way as a judgment. If we cannot define exactly what environmental education is, then how can we possibly make a value judgment about which programs are best? We cannot, and *OPTIONS IN ENVIRONMENTAL EDUCATION* does not.

The PROFILES present a sharper focus than abstracts alone can manage but the ABSTRACTS section fills out the general picture. Choices for PROFILE treatment may disappoint some people but the ABSTRACTS cover the variety and diversity of environmental education efforts. The few lines of an abstract hardly do justice to a program but they will encourage communication and the exchange of ideas. Facilitating these contacts and choices is a major function of dissemination and of this book.

The third major category included in the book is RESOURCES. This section is largely self-explanatory; we have collected a catalogue here of tools for the environmental educator.

Coupled with the PROFILES and ABSTRACTS we are attempting to do just one thing: Encourage!

And that is the message of this book. Do it! We can only be optimistic that *OPTIONS IN ENVIRONMENTAL EDUCATION* will help in some small way.



## II PROFILES

Massachusetts is a big, sprawling, and multi-faceted state. It is not surprising that environmental education here should reflect this. From the Provincetown dunes to the Berkshire hills, Massachusetts encompasses an incredible range of landscapes and communities. Wilderness, rural agricultural, semirural, suburban, small cities, and dense metropolitan residential areas dot the state map. Many of these places are profoundly different from one another. So too are the varieties of environmental education offered in them.

The following pages are filled with visits to some of these programs and places. We have tried to capture the feelings and activities of environmental education there, and the attitudes of the people involved with making it happen. This is not a cookbook and there are no foolproof recipes, but the information in these profiles is presented in the hope that familiarity will breed experimentation, and especially that cross-pollination will eventually produce a better hybrid.

There are not many answers here, but you may come up with some better questions. There are so many ways that environmental education can be brought into a student's experience, and so many possible definitions of EE itself, that we have attempted a sort of smorgasbord. Some of the activities profiled occur in schools, some away from them. Some are geared for a certain student type, others for the general audience. Some programs are recipients of federal grants, while many are not. We have included a look at resources and activity outside schools which schools might take advantage of. Assembled, is a collage of the different ways that different people in different places approach environmental education, and it's important to note that these are not perfect models. They're on-going, growing and changing efforts. Learn what you can from these experiences but don't expect them to fit your situation exactly, because they won't. But the experiences of these people may help you.



## PROJECT GREENTHUMB LUNENBURG

Like many recently built high schools, Lunenburg High is a single story brick structure with large wings grouped around a central courtyard. The courtyard, like most such courtyards, was until recently empty and little used. In the winter of 1977 the courtyard changed.

The center of attention in the courtyard now is a big quonset-type greenhouse with an attached potting shed. To one side is a long row of glass covered cold frames. The courtyard contains young fruit trees and a grape arbor, compost heaps and planting beds, hand laid slate walkways and newly terraced flower gardens. More significantly, the courtyard holds the collective efforts and dreams of a bunch of high school students and their teachers, participants in Lunenburg's Project Greenthumb. With help from their teachers and the school's maintenance personnel the Greenthumb students have built and are operating everything in the courtyard. They have transformed a dead space into a lively and handsome gathering place, and have received an education doing it.

Project Greenthumb is an environmental education project funded under Title IVC of the E.S.E.A., a source of much of the federal funding for EE in Massachusetts. Greenthumb began as a result of growing community concern over the polarization among students at the school, and an expressed desire for some integration of vocational training in an academic setting. Lunenburg residents were polled on their opinions about the high school, and one thing which came out loud and clear was unhappiness that students were dividing into rigid cliques. Community residents, and some teachers at the school, felt that education should act to heal divisions, not create them. Greenthumb was their response.

The balance of academic and vocational work is very important here. Ostensibly, Greenthumb is a drop-out prevention program. Students who have lost interest in the standard curriculum will be offered Greenthumb as an alternative. But project director Doug Fleming said that his students are tired of being seen as potential drop-outs. Though they are often routed into the program through the school guidance office, Fleming says the Greenthumb participants are "all different types. Sure we have potential drop-outs, and we lose a few now and then, but we've got college prep kids in here too, some slow learners and some real leaders." Fleming's point is that, in a way, all high school students are potential drop-outs. The concrete,

tangible educational experience offered by Greenthumb should not be restricted to a particular type of student. The Greenthumb approach uses practical training in horticulture and forestry to teach basic science (plant propagation, geology, silvaculture, botany, field biology, and natural history) concurrently with the building of employable skills.

Fleming explains that "Project Greenthumb is a program which develops job skills in horticulture and forestry, and provides an alternative educational experience. What has not been surfacing in the press releases is the kind of environmental education experience our students enjoy as they participate in the forestry, or natural resources phase of our program. The exploration of moist hemlock ravines, dry oak forests, and quaking bogs provides excellent experiences for understanding the inter-relationships between plants, animals, and their physical surroundings."

The horticulture aspect of Project Greenthumb includes operation of the greenhouse, where students raise cutting flowers and houseplants for sale and prepare seedlings for the summer vegetable garden, as well as the study of plant sciences. The forestry section spends time in the woods learning forestry practices hands-on, developing a working understanding of forest management techniques while pruning, thinning, cutting, and clearing. The students have cleared cross-country ski trails, built a log shelter for a warming hut, constructed a nature trail and thinned an overgrown lot. All this was done on town owned conservation land, and Greenthumb's services were duly noted with gratitude in the Town Report. What's especially interesting about Greenthumb is that the students enrolled in the program (forty this year) gain expertise in both fields. A student's concentration switches every three weeks, so that by the end of the school year they are capable in either forestry or horticulture, expanding their job prospects and giving a sense of achievement many have never felt before.

An important component of Greenthumb's apparent success is its emphasis on personal responsibility. Six students who participated in Greenthumb last year have returned as student leaders this year. All work done in the program, from trail cutting to greenhouse building, is done by self-organized teams of students. Though Greenthumb is officially listed as an elective alternative to Lunenburg High's general biology requirement, it offers skills more difficult to assess: self-assurance, maturity, and organizational ability. When the project visited a local saw mill it came as no surprise to Greenthumbers that the

mill foreman would call his clipboard the most important tool he had. These students are being given a hardnosed taste of real work, learning to raise and market their own plants and establish contracts for their own services. But this experience is wedded to academic discipline in an unusual and exciting way, helping to break down social barriers among students as well as teaching them information they will need to survive in the world.

Like many EE efforts, Greenthumb does not separate activities by traditional sex stereotypes. One girl said to me, as she went off into a spruce grove with a long handled pruning saw, "I guess I'm learning to do real things, things I can see, and I like that."

Doug Fleming and the project staff hope that Greenthumb is doing real things the community can see as well, and he has high hopes for the project's continued operation after the grant expires. Meanwhile the Greenthumb students have work to do, finishing the interior of the potting shed and getting bulbs ready for spring sales.

#### CONTACT

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- Project Greenthumb is in the process of developing lesson plans and curriculum guides for the combined academic and vocational work in horticulture and forestry that the project offers. These materials will be distributed widely if the project is validated for dissemination during its funding period.



NEW ENGLAND AND THE SEA  
TRITON REGIONAL HIGH SCHOOL, BYFIELD

On a bright morning in May the 65' charter fishing boat "Lady Anne" rocks gently on the swell over Jeffrey's Ledge, seventeen miles off the Massachusetts coast near the New Hampshire border. Her rails are bristling with rods and draped with hand lines as her passengers eagerly set out bait for cod, pollock, and haddock. Today's party is composed of junior high students, and if this does not sound much like school, it doesn't feel much like it either. Which may be part of its success. But the students have spent considerable time studying the history of commercial fishing in New England, past and present methods, the social and cultural impact of marine industries on their communities, as well as marine biology or oceanography, and fish identification. The boat's crew is a bit unusual too: certified teachers.

Already this morning the kids have pulled a string of lobster traps and set and hauled gill nets. Now they're experimenting with the traditional long-lines used by fishermen off this coast for centuries. The catch will be collected and identified, sorted according to species and habitat. Stomach samples will be analysed to determine the fish's diet, and specimens will be returned to the classroom preserved in fixatives for further study. But not all the fish will end up in bottles of alcohol. Quite a few of this morning's specimens will find their way into the oven, preserved in butter. "I probably shouldn't admit this," says the boat's captain with a grin, "but one of the most convincing arguments I've ever found for this sort of education is sending a kid home with a haddock."

Bill Eastman is the "Lady Anne's" captain and part owner. He is also a history teacher at Triton Regional High School and director of that school's NETS program (New England and The Sea). NETS takes advantage of Triton's rural, coastal setting to build an educational experience that is both relevant and ambitious. A day aboard the boat is the most dramatic aspect of NETS, and something students anticipate with pleasure, but it is only one part of a far reaching effort to ground their education in the natural and social history of their own region. At the bottom of NETS's operating philosophy is the belief that if education is locally oriented students may be motivated to learn more, and more completely.

"The academics are important of course," Eastman explains, "but I'd be satisfied, very satisfied in fact, if students in the program simply began to realize the dangers of harbor pollution. Because when they understand

that, they're understanding something about water oxygenation and the requirements of marine life for oxygen, and the fact that when you dump diesel all over the harbor that process is hindered, and that if oxygenation stops fish die, and if the fish die an industry goes too, an industry that's been essential to this area for hundreds of years." This is good environmental teaching, connecting causes and effects, or rather letting the student make connections through experience and observation. Doing this in a logical and graphic manner brings the lesson close to home. NETS does this in a variety of ways, and the common denominator is the sea.

"The Great Newbury Marsh Hike" is a three day exploration of the salt marsh that meanders through Newbury and Rowley, near the high school. Students set off in dories on a tidal stream to begin rowing and portaging their way to the tip of Plum Island, part of the Parker River Wildlife Preserve. The marsh hike is incorporated into students' history and physics classes, which combine for the field experience. The history class has studied the natural and cultural history of the area, patterns of civilization in surrounding towns and economic development. Physics students have investigated celestial navigation, tide action, and water physics. At night around the fire each group fills the other's gaps, creating an atmosphere of support and sharing. The hike is planned and organized entirely by students, who must gather the required gear, divide into teams and plot their own course through the maze of tiny channels.

In an interesting twist, a budget saver as well as an educational option, the dories used by students in the marsh hike are built at Triton by members of a boatbuilding extra-curricular club advised by a science teacher. The class not only builds dories but studies the history and evolution of seacraft and working vessels, an appropriate study for a community whose roots are tied to fishermen and boatbuilders.

A four day spring "Round Robin" gives 7th and 8th graders an intensive succession of out of the classroom experiences. Capitalizing on curriculum units in maritime history, the literature of the sea, ocean sciences, and creative writing, a year of inter-disciplinary study leads up to the "Round Robin." A day is spent exploring tide pools and sandy beaches at the Odiorne Point Nature Center. A walking tour through Newburyport is a discovery of history through architecture, as students learn the significance of widow's walks and captain's houses. A day spent as wandering poets, composing verse by the sea



and sharing it among the classes encourages expression and communications skills. And a voyage on the "Lady Anne" completes the kids' "Round Robin". The juxtaposition in close proximity of such diverse activities leads to a fuller understanding of both the unity and variety of the natural world, and its place in human history.

Of course not every school will have on staff a teacher whose family dates back to the area's first settlers, as Eastman's family does, and far fewer still will be fortunate enough to have a teacher who is a charter boat captain with his own vessel. But Eastman is quick to point out that these are not the key to NETS. They are nice, but not essential. The Title IVC grant Eastman won for the program has also helped, but Eastman claims that this is not critically important either. In fact, he wondered if the best programs weren't the ones that grew slowly without any grant at all, gaining increasing community support as they demonstrated their worth. He has to do this with NETS. He insists that any fishing town could charter a fishing boat, because spring is a slow season and the captain can be convinced to cut prices, especially if he's made to realize that his efforts are part of a community project to expand their school's offerings. That's the key to NETS. "In any given week," Eastman says of his deep community support, "I could bring out twenty-five parents to help run the program."

"It's not sophisticated equipment you need," he goes on, "It's just commitment. We've had tremendous help from the local fishing industry, and our teachers are really interested and committed. All I've really done is organize some activities that were already happening here at Triton and focus them. A history teacher interested in local history has developed a curriculum, an English teacher wants to study maritime literature. Anytime you get your staff really enjoying what they're doing, you've got a good program." Will his program continue after funding runs out? "I guarantee it. I wouldn't waste my time as director presiding over the dissolution of the program." Eastman is fulfilling this guarantee by building the components of NETS so thoroughly into the life of Triton Regional that they no longer appear as isolated activities, but as essential components of a student's education there. He'd like to market student caught fish at the school. That, he figures, would solidify his base, thereby keeping that haddock on the table.

#### CONTACT

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-- NETS has developed a thorough resource bibliography for marine studies, including fact sheets and article reprints. They are currently finishing a curriculum and course syllabus.

## OUTDOOR EDUCATION PROGRAM

### LANESBOROUGH

What motivated a very small school (less than four hundred students enrolled in grades K-6) in a very small town between Pittsfield and Williamstown in the Berkshire hills, to set up one of the earliest comprehensive environmental education programs in the state? Lanesborough Elementary School conducts at least one hundred and fifty outdoor or environmental experiences, ranging from schoolyard investigations to a five-day biology and natural history field trip which takes the entire sixth grade to Cape Cod. All this is done as a matter of course, without much fanfare. It is accepted as an important part of a student's elementary education. But this sort of program doesn't just happen on its own. Someone has to create it and run it. Why would a small teaching staff put in long extra hours to develop study guides for outdoor areas near the school?

"It's education for life." answers Tony Boyer, Lanesborough's Outdoor Education Coordinator and a teacher in the school, "We're helping kids grow into adults. That's our job, and they're going to do it out there," his hand sweeps across acres of woods and fields behind the school, "not in some brick building." The school's latest addition to an already strong commitment is a network of nature trails running out from the back door. The trails are thoroughly blazed, cut clearly enough to be easily followed by youngsters but not turned into the near highways that some over-blazed trails become. The area covers several forest types, a couple of old foundations overgrown with myrtle left by earlier settlers, lilac and quince gone wild, hedgerows and stone walls, an abandoned orchard, and a cornfield still in use.

These are the elements of the rural New England countryside, and hardly unusual, but how many of us grew up walking in these settings without realizing that a place's history can be traced in its fields? Students who learn that quince and lilac were planted to mark the entry of a farmhouse, that the quince fruit is high in pectin and served the farm wife as a natural preservative for jellies, and that long after the farm has disappeared the quince still flowers and fruits deep in a second growth forest, have gained more than a knowledge of facts. They have been given an introduction to the evolution of their region, have learned to use their senses in solving puzzles. They have been shown that a little digging tells a lot of stories. And that a walk in the woods can be a learning experience.

That's a single example of what Lanesborough students are offered during their ele-

mentary education. "It takes students out of abstract settings and gives them something to hang onto," says George St. Pierre, now superintendent of schools in Lanesborough, who was principal of the elementary school in the 1960's when Lanesborough's environmental programs began to grow. "The environmental component gives students some of the experiences necessary to their becoming not just better students, but better citizens as well."

St. Pierre says "We designed our program at coffee breaks, during free periods, over school lunches, in the teachers' room, any time we found the time. A lot of the work got done over late night beer and pizza sessions at my house!" A CETA grant provided the school with workers to build their new nature trail last summer. The cost of operating the whole program is kept low by integrating activities into the school, rather than having a single, high overhead endeavor.

Another aspect of the school's program is the peer teaching done for Lanesborough pupils by students in nearby Mt. Greylock Regional High School's Community Studies Program (also profiled in this publication). Mt. Greylock students teach Lanesborough youngsters the rudiments of field biology and environmental sciences, while providing role models for the younger children and helping to assure an easy transition for them from the small school into the larger one.

The sixth grade trip to the Cape is necessarily expensive. Transporting a large group of students across the state and housing and feeding them for a week is no small chore. This trip means a lot to the students, though. It's a chance to apply the work they have done at Lanesborough to a completely different environment, and for many it will be the high point of their school year. The thought that the Cape trip might be phased out for economic reasons prompts sixth graders each year to sponsor a magazine and newspaper drive, annually raising more than \$2000 toward the financing of their own trip.

Outdoor and environmental activities are so well woven into the fabric at Lanesborough that it may appear easier to accomplish than it is. Fourteen years experience helps a great deal, and over the course of time various Lanesborough teachers have contributed to a fat lesson guide that makes the fullest possible use of the outdoors around the school. The lessons emphasize sensory awareness and simple investigative techniques, but have strong components of math skills (measurement, rudimentary geometry, cartography), English and history (role playing, written journals, community



history), and art (sketching in field notebooks). The fact that this resource has been gradually assembled by a number of different teachers indicates a key facet of Lanesborough's approach: volunteers cope with the work load by spreading it around, and over time. At Lanesborough the importance of environmental experience is recognized as a long term thing. Thus the program built at the school leans heavily toward continuity.

This dedication is added to what Boyer calls "whole hearted support throughout the community at all levels." The good foundation shows. Maybe this is why the class of graduating sixth graders each spring chip in to buy a special gift for the outdoor program of their school, as a way of thanking everyone involved and making sure that the experience they've had will be available to future students at Lanesborough.

#### CONTACT

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-- Lanesborough Elementary School has compiled a comprehensive "Lesson Guide for Use in Outdoor Education".



## PROJECT OUTSIDE/INSIDE

### SOMERVILLE

Open land in East Somerville is hard to find, and what there is tends to get paved over as soon as it becomes vacant. It is hardly an agricultural center, and not the first place you think of when gardens are mentioned.

But gardens will grow in East Somerville, and an innovative curriculum in development by the Somerville public schools is seeking to prove that more than vegetables can be produced in these plots. Pride of place, ethnic heritage, and community responsibility can grow in gardens too. One garden grew in the yard behind the East Somerville School, planted by sixth graders with help from their teacher and the staff of Somerville's Project Outside/Inside, which has sponsored gardens in or near several Somerville schoolyards. Anyone who's ever tried to turn hard packed city soil can appreciate the work those sixth graders did. They planned their garden, prepared it for seed, and planted in early April. From then on they tended, watered, weeded, watched, and waited. For probably the first time in their lives a small piece of the school had become their own, and they were proud and protective of this tiny patch of ground. One young girl's enthusiasm speaks for the whole class. After being given her curriculum/workbook for the garden experiment, Lizzie returned to her teacher the next day and said "I showed my mother the book and she loved it so much she's going to take up gardening again and help me make a garden in our backyard!"

The power of home grown food is remarkable. It can act as a force around which whole communities will unite. An indication of the energy generated by Project Outside/Inside's gardening program is the fact that parents and teachers seemed as excited by it as the students, and when problems with schoolyards as garden sites began to occur some parents volunteered their own yards.

On Memorial Day weekend, a few weeks before school ended and about two months after the gardens were first begun, vandals got into the East Somerville School garden and destroyed the work of the young gardeners there. Though the vandalism was an emotional setback it provided, in some unexpected ways, an important lesson -- perhaps the most direct piece of education the kids would receive from their garden. Their teacher asked them open-ended questions in response to the destruction, trying to get students to verbalize their feelings about what had happened. The issues raised might not seem associated with gardening:

values, morals, citizenship. But they have everything to do with education, particularly environmental education. And they form the heart of what Project Outside/Inside is working toward with their broad-based curriculum development and review efforts in the Somerville schools.

The vandalism made concrete what had until then been an indirect lesson, that cooperation and respect are basic to a healthy individual and a healthy society. Nobody on the project staff would suggest destroying gardens as a part of the curriculum, but the responses of East Somerville sixth graders were heartening and enlightening, and they suggest that the deeper purposes behind the project's gardening program are being achieved: "I think if they have to do that they must have problems..." wrote one student, and another said, "They did it because they were jealous." But the predominant emotion was frustration, "The garden meant a lot to me. I planted and put up the fence, I dug, nailed the pole and the fence together and other things. I could have done more if nobody messed it. I think it was mean and horrible. It makes me feel very mad and very upset."

Project Outside/Inside has its own roots in the environmental movement of the early 1970's. It is an educational project with clear ties to the person-to-person community organizing that followed the initial spurt of Earth Day energy. Project Outside/Inside's director, John Madama, began his career in EE as a truck driver collecting waste computer paper for sale. Truck driving led to questions of how people could be encouraged to do more recycling, which suggested a community education plan. An Environmental Protection Agency grant supported the creation of a slide-tape presentation and the initial work on a recycling project for the city of Somerville. Pick-ups of glass and paper were regular but the city's residents didn't respond well to urgings that they separate their trash and recycle rather than waste. On the assumption that a well educated population will adopt changes more easily, Madama and others began to think in terms of a school centered recycling education project. A pilot curriculum K-12, called RECYCLE, was designed and implemented selectively in the schools. On the basis of its popularity, a Title IVC grant proposal was written. Project Outside/Inside was born.

This history is important because it shows the gentle growth of a movement into an educational program, and Project Outside/Inside is a bit different from a lot of other efforts within schools. Rather than concentrate on single classes or programs, the project is trying to instill an environmentally healthy

attitude in school curricula across the board, aiming for broad and subtle change rather than a few dramatic examples. Because Madama had worked with many teachers during the designing of the RECYCLE materials he had a good working understanding of what teachers really needed; because he was not actively teaching each day he was able to concentrate on the writing. Outside/Inside is convinced that the only way to infuse ecological attitudes into student education is to make the ideas fresh and personal, and immediately accessible. The project's dual focus is on community responsibility through recycling, and especially gardening; and on personal health maintenance and nutrition. Thus the title: Outside/Inside.

Curriculum materials are contemporary and active. Some take the form of mock newspapers or comic strips. All invite the participation of students in actual work. Students are expected, even forced, to become involved. The connection between gardening and nutrition and personal health is obvious, but changing long held habits and attitudes can be difficult. For city kids who have had no previous contact with growing things, a garden is a mysterious force. Tying their own health to the garden's is not that easy, but when a student has managed this trick further changing comes quickly.

The project staff suggest that changing the habits of teachers and parents is a job not mentioned in their mandate, but one which must be done concurrently with teaching students. Their hope is that the curriculum materials they have been writing will be broad enough to serve as an instigating force in other schools and communities, and since the project has been validated for dissemination next year the message of gardening and health will be shared more widely. And with a little luck and patience, gardens will continue to grow in Somerville too.

#### CONTACT

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-- Project Outside/Inside has available many curriculum resources including "Ladybugs and Lettuce Leaves", the student workbook on gardening and human/environment relations, high school texts in health and nutrition sciences, the RECYCLE series of teacher manuals, a guide to using school grounds for class activities, films and

slide-tape presentations. Ask for a resource list from the project.



## PROJECT E.P.I.C. WESTFIELD

Don Lambert is a veteran environmental educator. For the past dozen years he has directed Project E.P.I.C. (Educational Project to Implement Conservation), working to establish and carry out a solid environmental program for the Westfield public schools. Operating out of offices on the second floor of an old, and recycled, building in downtown Westfield, Lambert takes responsibility for everything from program and curriculum development to field teaching, logistics and organizing to teacher training. With a small and dedicated staff he's responsible for implementing environmental education in a diverse way throughout an entire school system.

Before he came to E.P.I.C. Don Lambert taught high school level vocational agriculture and biology classes. The solid and pragmatic base shows. "My voc-ag background has provided me with a certain emphasis on the practicality and diversity of science," he says, explaining his attempt to bring science into sharp focus for Westfield students through contact with the environment. E.P.I.C.'s job, simply put, is making this as easy as possible. Take science out of the realm of the imagined and put it into the world of the real. Doing this sometimes requires that pure science be integrated with other subjects, like social studies and health, or writing and reading. This is what E.P.I.C. does for Westfield teachers, designing programs and providing the physical and curriculum resources to back them up.

"It's absolutely essential." Lambert insists, "Having a resource center like this is the only way to inject environmental emphasis into the schools on a continuing basis. Even a single environmental coordinator would be much more useful than leaving it all up to the teachers, because it's not that teachers are unwilling to be involved, it's just that they don't have the time or energy to set up the organization needed to make a program run smoothly. That's what we can do, or at least what we try to do."

A resource center and coordinator may in fact be essential, and certainly useful, but they are far from common. Mostly teachers do end up with all the work, and the more adventuresome the teacher chooses to be, the more work there is. One of the critical obstacles can be frustratingly simple: A teacher may be sure of wanting to try something but lacking the background to pull it off technically.

This is the gap E.P.I.C. steps into. Established in 1967 with a Title III grant, the center began with a year's planning funds and three years of operating budget underwritten

by the funding. From the start local concerns predominated, Lambert explains, "We wanted to use the existing curriculum and local community resources as our base, not to provide an independent 'ecology' type program." In order to supplement and expand the existing base in Westfield E.P.I.C. began to develop some interesting, applicable materials, like a field trip guide covering all sorts of options within an hour of the town, from a visit to a local dairy farm to an exploration of the heavens at the Amherst College planetarium. The guide gives all relevant information on costs, requirements, necessary preparation, contacts, and addresses. Most of the trips can be done with the E.P.I.C. staff. The point is to get information about outside activities into the hands of teachers in a useable and handy form.

Project E.P.I.C. developed a resource library of books and periodicals at their offices, open to anyone interested, and the staff offers a reference service to teachers, researching particular interest areas. This relaxes the burden on teachers, allowing them to concentrate on teaching and still keep current with what they teach. E.P.I.C. creates and organizes special field events, like a "Look Back Day" held at the Storowton Village Museum in West Springfield. On one school day every third grader in the school system participated in 1800's activities, dressed in period costume, making butter and preparing colonial meals, and working in the museum's craft shops. E.P.I.C. produced the event itself as well as the pre and post classroom work which was essential in making it a true learning experience.

The project's offices occupy several rooms, three of which are filled to the brim with equipment. Need an increment borer to help your kids study the age of a forest? Fish tanks and terrariums? Hip boots to wade through a swamp, or even a boat to go up the river? Westfield teachers can go to E.P.I.C. for all this and more. This makes inclusion of environmental and outdoor work much simpler for a busy teacher, and thus much more likely. Moreover, E.P.I.C. seeks out the least expensive replacement parts for equipment, often making their own to save money, preserving as much of the budget as possible for instruction.

One of the exciting things about the project is its breadth. From running a resource library to providing a one-week residential experience for every fifth grader at a nearby Boy Scout Camp, creating curriculum units and acting as a materials depot for hundreds of live chameleons that are part of the elementary science SCIS II kits used by Westfield schools,



E.P.I.C. is constantly touching base in many areas. In this way the project itself is a mirror of its credo to provide a multi-disciplinary environmental education base. "We try to use all the local resources," Lambert says. "Human and cultural and historical as well as natural. The environment is more than a nature trail, and we try to give students this wider view." In fact, one of E.P.I.C.'s goals is the exposure of young students to successful individuals in environmental fields. These role models are a solid reference, preventing environmental studies from seeming irrelevant and offering new options for student careers.

Because E.P.I.C. has been operating since 1967, suffering the fluctuating trends of funding interest, it is worth noting that the program survives because it provides a demonstrable service in the schools. Every year there is pressure to cut the budget. But every year parents and teachers line up to support E.P.I.C.

When Title III funding ended the project was picked up in the city budget, and has been locally funded ever since, but it had the good fortune to have been able to purchase most of its equipment, including the school busses E.P.I.C. uses to transport children on field trips, during the Title III period. To anyone connected with schools, E.P.I.C.'s busses will seem a real benefit, greatly alleviating the hassles of student transportation for field experiences.

Money continues to be a problem, restricting the project's expansion. Don Lambert wishes he were able to do more inservice teacher training, which he believes is an essential part of bringing environmental concepts into education. He wishes he could expand the field trip offerings, especially curriculum related things like "Look Back Day". But after twelve years struggling to keep his program healthy he has become something of a pragmatist, and he looks on E.P.I.C.'s work with seasoned pride. "Someone has to connect the schools and teachers to all the incredible resources available in our community," he says, "We do that, I think, and we will continue to do that in the future."

#### CONTACT

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-- E.P.I.C.'s resource library is open to the public, and the project has written many publications for the teacher seeking

to implement conservation or environmental education. These include field trip guides, plans for tying in-school work to E.P.I.C. trips, and descriptions of historically based field experiences and wild foods studies. These are Westfield and E.P.I.C. centered, but might be of use to other communities as examples.

N.E.E.D. COLLABORATIVE  
CAPE COD

Snow last night has left a few white inches on Cape Cod's outer dunes. The storm continues into this morning off and on, spitting snow and swirling wind, cutting visibility to a few yards. A foghorn blows at regular intervals. The high dunes muffle the sound of breakers crashing nearby. A class of fifth graders is exploring the Cape Cod National Seashore on a February morning. After breakfast they spend an hour or two preparing for this hike, sitting in a big room at the old Coast Guard station which is their school and home for this week. On their way to the beach they spent an hour at the Province Lands Visitor Center, usually closed for the winter, where Ranger Warren Perry overcame laryngitis to explain the flora, fauna, and history of the outer Cape. Now the children straggle through the dunes, more or less in single file because they've been urged to avoid trampling the delicate vegetation that holds the sand in place. Every few feet the group pauses while their leader, N.E.E.D. Collaborative director Rich Delaney, explains something they are passing or asks a question.

"If you were alone out here," he asks, "Do you think you could find your way back to the Visitor Center?" A chorus of affirmative response. "How?" The students answer that they could follow their own tracks in the snow, neatly circumventing Delaney's attempt to make them closely examine their surroundings. He tries another tack, asking what the kids hear around them that might help in locating their position. Foghorn, wind in the dune grass and brush, ocean lapping the shore. Hands stretch impatiently into the air and soon voices take over, describing in detail the sounds heard when the talking stops. At a frozen bog Delaney invites students to try eating the cranberries still on the surface. A few do, and grimace, and Delaney warns "You'd better learn to enjoy them. That's your lunch for today!" His students are skeptical, but not certain he's kidding. Anything can happen during their week at N.E.E.D.

The N.E.E.D. Collaborative provides a one-week environmental experience based at a former Coast Guard station on Pamet Beach in Truro. Three Cape Cod school systems combined to form the collaborative: Falmouth, Dennis-Yarmouth, and Harwich. The cost of operating the program is divided among member school systems on a per student basis, and every fifth grader in the three districts spends a week at N.E.E.D. The collaborative is an attempt to guarantee that students will have well organized direct contact with their natural and social surroundings as a part of their regular education, encouraging them to take advantage of and be-

come more responsible for the protection of the natural resources on Cape Cod. Such a residential program would be a financial impossibility for a single school system, but the collaborative eases the burden by a cooperative arrangement. The attempt has worked well. Currently fully enrolled, and on occasion forced to run two classes at once, the collaborative handles the demands of only the three member systems. But Delaney hopes to expand, perhaps taking over the Race Point Coast Guard station, soon to be phased out of use by the Guard. "I'd like to see every kid on the Cape get a chance to come down here," he says. He is momentarily spared having to control the students; Ranger Perry has them captivated with a bucket of fish picked up at the Provincetown dragger docks this morning. The children were prepared for this, and stumble all over each other in eagerness to be the first to identify flounder, haddock, and cod.

"This is probably the high point of their elementary schooling," Delaney says. One fifth grade teacher who has since gone on to teach in higher grades claims that he gets students who went with him to Truro years back, and still talk about the experience. The collaborative is an offshoot of a National Park Service effort which provided sporadic visits for Cape students to the shore. When the three member districts decided that they wanted a more regular and established program, they formed the collaborative, but kept the original acronym (National Environmental Education Development) as part of the name. The collaborative is no longer directly tied to the Park Service, but does enjoy a great deal of support and cooperation from personnel like ranger Perry.

What makes N.E.E.D. so special is probably the degree of preparation that goes into it, and the duration of the residential experience. Well in advance of their visit to the station students are given a workbook/text written by Rich Delaney, which introduces them to what they will be doing when they arrive. The Seashore Book is a dynamic, involving and imaginatively designed soft cover notebook that includes games, puzzles, quizzes and information to take students right through their visit. Natural and social history are both covered in the book, as well as specific discussion of the local ecosystems and how to best study them. Before students ever go outdoors they're well acquainted with what to see and do there, and Delaney is convinced that this familiarity allows them to participate more fully in whatever they do.



Students come one class at a time to the station, which is used as a youth hostel during the summer months. They are accompanied by their classroom teachers, so there is a strong continuity with their regular schooling. The week is not quickly forgotten, and Delaney says students may learn more in a week than their parents know. Kids often return home to deliver lectures on the history of Cape Cod, or the names and functions of all the parts of a commercial fishing boat. Obviously a week is not time enough to do an in-depth study, but Delaney feels that N.E.E.D. serves its purpose in two ways: by sparking the interest of the students, and by keeping environmental education in the public eye.

Students who go on the N.E.E.D. trip are asked to contribute \$15 toward the expenses involved (food, transportation, maintenance, instruction, and materials, etc.) but nobody is ever turned away for lack of money. Total cost of operating the program comes to well below \$60 per student, per week. Contributing to this low budget is the fact that the Coast Guard station is available rent free in exchange for its upkeep, and the use of college teaching interns to supplement the staff. But the chief reason for the collaborative's financial feasibility is the idea of collaborating. Keeping the program running at capacity is a far more effective way of operating a residential center like this than trying to serve only one school or district. Not surprisingly, Rich Delaney is excited by the collaborative model, but not just for monetary reasons. What is important, he explains, is the example set. Cooperation among schools can make the best possible use of resources for all involved.

#### CONTACT

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- The Seashore Book is a very good and innovative workbook/text oriented toward the specific N.E.E.D. experience on the outer Cape, but could be applicable in many other marine environments, and useful as a model for creating similar texts.



UNIFIED SCIENCE CURRICULUM  
DEERFIELD ACADEMY, DEERFIELD

In a crowded Nebraska courtroom on a sweltering summer day the president of a cloud seeding operation defends himself against charges in a suit brought by two groups of farmers. One group had contracted for the weather modification services, but now they claim that ineffective control of the process brought too much rain, hail, and thunderstorms, devastating their crops. The other group, from a nearby town, believes that the seeding drew rain away from their area, aggravating already severe drought conditions. In this uncomfortable spot the company president is attempting to justify the scientific basis for his work while freely admitting its imprecise nature. Both sides in the conflict have sought expert witnesses to testify on their behalf, and arguments are detailed and convincing.

Not an unusual scene in today's competitive and high investment agriculture, especially where environmental manipulation is concerned. Except that this scene does not take place in a courtroom at all. It is happening in a classroom at Deerfield Academy, and all the participants are high school freshmen. They have thoroughly researched and prepared for their roles in this eight day long simulation. Aside from the obvious excitement generated by the event (which often sounds more like a debating class than freshman science) students in the class are picking up at least two critical lessons in scientific reasoning. One is the value of extensive research, familiarizing oneself with the broad background as well as the specific detail. The second is the great variety of "true" answers to any question. They are discovering through all this in a very personal way some of the ramifications of human interaction with the environment.

Deerfield Academy is a private school in western Massachusetts, well known and generally considered traditional in style. But their science program seems anything but stodgy. The school has adopted the Unified Sciences Curriculum (U.S.C.) first developed by the Center for Unified Science Education at Capital University, in Ohio. U.S.C. differs from many other prepared curricula in that it specifies an approach rather than content. The intention of the Unified method is to demonstrate graphically the interconnection of scientific disciplines, and the relationship of sciences to daily life. Students are offered locally oriented and designed exercises as well as broader lessons. The resulting science curriculum is elliptical in form, touching down all over the place, often not in science at all but in the world of ethics or public policy.

Such is the case with the role play on weather modification, part of a meteorology segment that is the only first-year science course offered at Deerfield. Why meteorology? Teacher Chet Corkum explains that meteorology involves basic work in physics, chemistry, biology, geology and astronomy. This is opposed to plain biology, the usual freshman science requirement at most schools. But more importantly, the weather is a very tangible reality for students, something present in their lives at all times, not just in class. Because knowledge accumulated during the meteorology course can be applied for the rest of their lives, students seem to work harder to get it, developing lasting skills. Kids in the class man a weather station in the building and keep careful records. They learn to study clouds and make forecasts, and to interpret weather maps provided by the National Weather Service. This is very practical science, and it works well as an introduction to scientific method, which is what first year sciences ought to do.

A sophomore year class at Deerfield concentrates on the physical environment, exploring the Connecticut River Valley location of the school. After studying river geology and ecology they go out to walk along the river's banks, viewing these processes in action. They read about water pollution, then gather samples and return to the lab for analysis, determining the extent of pollution locally. This course uses role plays too, always in an attempt to build student confidence with self-directed work, and teach research skills by necessity. Being in an open forum, presenting evidence to support a case, encourages a student to do solid ground-work in a subject far more than a test will do.

There are no prepared texts for the Unified approach, simply because no texts exist which cover the range and substance of disciplines involved. Also, it is seen as critically important that experiments and examples reflect local conditions whenever possible. Deerfield teachers employ many different text materials, from Weather Service hand-outs to current newspaper articles, films and filmstrips and a variety of science texts which are kept on reserve in the science library. This diversity keeps students interested, and allows the teachers to focus attention on whatever they want, when they want to, without being tied to the pace of a textbook. Of course it also demands a lot from the teacher, but Chet Corkum insists that the rewards are worth the effort on his part.

The real emphasis in U.S.C. centers on experiment, observation, and research. It may be imploding a tin can in the lab to demonstrate the action of gasses under pressure, or taking

a weather station reading in the morning in order to make a prediction later in the day. Do things and you will discover. Students are expected to learn, rather than be told.

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- As a regional center for the Federation of Unified Science Curricula, Deerfield has prepared a variety of curriculum aids, lesson plans, and informational materials describing the Unified approach and its particular application at Deerfield. Teacher training is also occasionally offered.



THOMPSON ISLAND EDUCATION CENTER  
THOMPSON ISLAND

The truck crashes through an icy crust and jolts into a deep rut. Tim White, Island Manager for the Thompson Island Education Center, is showing me around the island on a bitter cold January day. A saltmarsh on our right trails off into a shallow inlet bounded with a sand beach. Driving over the beach we pass bare roots dangling from an abbreviated cliff. "Look at those trees still hanging on," White says, pointing, "That cliff got cut back by half during the blizzard last year." Three black ducks glide across the headland to join a large group resting in the water just offshore. A pheasant explodes from a hedgerow, flies a few clumsy yards and lands in an open field of stubble grass. A large windbreak on the bluff we are crossing now obscures the view but softens the cold breeze off the ocean. Less than a mile away through these tree branches, across shining seas, the towers of Boston's downtown skyline poke into the horizon.

Thompson Island is a bit like the complicated, skewed drawings in childrens' books: everything seems normal, but the caption asks, "What's wrong with this picture?" Though the island's 157 acres of salt marsh and open fields, clay cliffs, beaches and coves, orchards, and tide flats would seem most at home on the outer Cape or the coast of Maine, they exist just a ten minute boat ride from South Boston's Kelly's Landing. And in addition to the natural wonders (which genuinely are wonders for many Boston children) Thompson Island boasts outdoor and indoor ropes courses, playing fields, a gymnasium, dormitories, dining halls, and classroom space sufficient for 125 students. All this, and a staff of trained environmentalists and educators. The island houses an environmental education residential center which offers a number of services to school groups of all sorts, providing a real alternative for schools seeking an off-campus environmental experience but unsure of where to go.

The physical plant on the island is a legacy of Thompson Academy, a private preparatory school that closed its doors in 1975. The Thompson Island Education Center, successor to the Academy, retains the old school's Board of Trustees as well as its buildings and its belief that quality, environmentally based education is a right for all. The island has had a history of educational use since 1814, and in its current incarnation it sets out to provide a special and much needed service. The center offers urban students contact with the natural marine environment, and to those from outside the city it can

serve as a base for exploration of both urban and marine settings. The island has a unique blend of wild and urban environments, and for a class from a rural inland area this chance to experience the interaction of the two, as evidenced by Boston Harbor, can be tremendously exciting.

The center supports itself with a small endowment and revenues from the services it offers. There's an environmental lesson in this too, not lost on those at the island. Because the center must test itself against the realities of the marketplace, it is forced to constantly revise and improve its offerings, adapting and changing in response to the needs of the community it serves.

For the students from South Boston High School enrolled in the Center's Harbor Environments Program the boat ride to the island crosses more than salt water. H.E.P. members are recommended by the high school's guidance staff, and they come to the island for eight weeks. Their mornings are occupied with classroom study of environmental sciences, and the afternoons are spent on outdoor activities, counselling, and work projects.

H.E.P. students have built three nature trails on the island, planted and tended a garden, and done erosion control work on the beaches. But this work is not simply labor; it is tied in to the academic study so that gardening may follow plant sciences and precede nutrition. Students are tutored in core subjects they may miss while at the island, to assure that they don't fall behind in school.

But probably more valuable than the academics for these youngsters is the different attitude of the Center staff. Teachers on the island become friends, not enemies. Working on a high ropes course forces students who wouldn't normally associate with each other to cooperate and be mutually supportive. And exploring the complex interdependence of natural environments helps make visible the similar skeleton of their own human communities. One Thompson instructor remembers two teenage girls who arrived at the island for the H.E.P. course stubborn and balking. "They were the worst troublemakers," she says now, "always refusing to do anything and trying to get out of working. They slowly began to change, but we continued to have trouble with them. Then an amazing thing happened. They had finished their course, and returned to the island for a single day program months later, and they were real leaders! First off the boat, showing their friends around, acting as if it were their island! The change really showed, and it made us feel good about what we're doing."

"Algebra on an island isn't any different



from algebra anywhere else," says center director Frank White, "So why do kids learn it out here and not at school? Because the atmosphere and environment are different." South Boston high students have even tried to preserve some of the spirit of the island by forming a support group back at school. This speaks well of the Thompson approach, one which evolves to suit the needs of each student. What is best for kids from South Boston may fall flat for students from the Berkshires, so the center's staff concentrates on flexibility and personal attention. They work regularly with ages from primary grades through adults.

What is best about the place is the opportunity it offers to both participate and observe. Though the island's natural beauty is striking, the staff point out that environmental education is more involved with attitudes than landscapes. If students learn to cooperate, and learn to recognize the cooperation essential in nature, perhaps they'll recognize that cooperation is important to any community, especially urban centers like the city of Boston, across the harbor.

But one young fellow, a member of a fourth grade class taking part in the island's T.I.D.E.S. (Thompson Island Design for Environmental Studies) program for elementary grades, had some trouble even locating Boston, much less understanding it. T.I.D.E.S. coordinator Mary Troy tells the story of William, an Hispanic boy. One sunny afternoon on a field below the center she asked him what he saw as he looked across the water to the city. The child waited a long moment in deliberation, then brightened up as he came to the answer. He turned to the teacher proudly and announced, "Puerto Rico!"

#### CONTACT

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-- The Center has a number of standard single day and residential offerings, and can custom design a plan for any group.

PROJECT O.P.U.S.  
TURNERS FALLS

The back of the truck is filled with cabbages. A truck smelling of wet cabbages is not the most likely place to find a high school teacher and administrator, but John Lepore, the young man driving the truck out into an open field behind Turners Falls High School, is not your average high school teacher. Lepore, as director of Project O.P.U.S. (Occupational Program in a Universal Setting), is teacher and advisor to a group of high school students who are blending their traditional education with practical study of agriculture and horticulture. Neither vocational agriculture nor pure high school academics, O.P.U.S. is an interesting blend of both.

The project operates a big market garden, student managed and tended, which has produced a lot of flowers and vegetables in the past year. The garden is an important segment of O.P.U.S., but the focus is to provide practical applications to classroom theoretical concepts. For example, a Spanish class studying the Mexican culture may grow, cultivate, and harvest flint corn, then grind it into flour and make tacos from it.

Handling themselves efficiently and competently as business persons is part of what students in O.P.U.S. learn, and it is important. These kids are not just planting cabbages, they are studying plant sciences and product markets in addition to practical agriculture. This mix gives the project its character, and Lepore says he's not looking for the student who could be at agricultural school, "Mostly we try not to duplicate what Franklin County Technical School is doing. However, we try to cover many topics related to agriculture and help students find jobs and further schooling in agriculture."

Turners Falls students may enroll in O.P.U.S. as an elective in high school. One full class period each day is spent in the program, and usually more time is involved, taking up some of the students' after school and free time. One class period a week is used for lectures and discussion, on anything from crop rotation and garden management to using a telephone well. The other four periods are used for actual work. The project has a small greenhouse attached to the school. Seedlings are prepared for the garden here, and during the winter, house plants are raised for sale. Class members take on special projects in the garden or greenhouse, under the supervision of the O.P.U.S. staff. The projects may be work centered, or more academic, like a study of plant propagation or fertilizers. All students must share

responsibility for the smooth operation of the program, and some of them may become paid student managers during the summer when O.P.U.S. joins forces with the Neighborhood Youth Corps to provide employment opportunities. The chance for a job is an incentive to work hard during the school year, and some managers may continue to work part-time. If they effectively carry out self-initiated projects they can receive an extra five credits for the year.

The formal curriculum for O.P.U.S. is loosely structured. The classroom that serves as the project's base is full of odds and ends and stacked with materials: Department of Agriculture flyers, back issues of Organic Gardening magazine, Cooperative Extension Service bulletins, cardboard boxes filled with flower bulbs and ornamental gourds. On this morning, two student managers are cleaning pumpkins for sale later in the week. The room appears to be well used, not sloppy but active. The big garden has just been turned over for the winter with only a few vagrant plants poking out of the clean surface, but Lepore takes me out to show me his small orchard, blueberry patch, and stem flower bed. When O.P.U.S. funding from Title IVC ends Lepore is convinced that the project can be largely self-sustaining, at least in terms of materials. He expects to sell enough produce around the community to pay for the seeds, tools, and fertilizers required to keep up the work.

Lepore is also anxious to integrate the O.P.U.S. experience into the whole school, so the project is not seen as an isolated, narrow effort. Toward this end he has hired a curriculum specialist to help teachers develop ways of bringing traditional academic disciplines into the garden. He urges his student managers to undertake independent projects in which they work as peer teachers with younger students and act as assistants for teachers bringing classes to explore O.P.U.S.

Probably the most important thing O.P.U.S. students learn is the value of self-discipline and motivation. They conceive and execute tasks covering different disciplines, grounding themselves in real work. "A garden grows more than vegetables," Lepore says. "it creates self-respect." On a rainy afternoon as we stand in the center of a barren corn patch talking of plans for next year's garden, the school track team comes over a rise in bright red uniforms and trots around the garden. "I guess they're using O.P.U.S. for something," Lepore grins, "but I'd like to get them more involved."

He likely will. A big sign on the road outside the school, left from the summer farm stand, says: "O.P.U.S., A Project That Belongs to the Students of Turners Falls High School,

Something to be Proud Of!"

CONTACT

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THE ENVIRONMENTAL CONTROL COMMITTEE  
B.M.C. DURFEE HIGH SCHOOL, FALL RIVER

A stack of impressive, official looking documents a foot tall is a testament to the ten year existence of B.M.C. Durfee High School's Environmental Control Committee. Each report is a thorough investigation of some subject of environmental concern to residents of Fall River, where the school is located. Many of the studies concentrate on water issues, since the city is laced with ponds, rivers, and streams. These reports provide resource inventories for local recreational lands, maps, field research results on stream pollution by industry, and statistics on pond pollution by vacation cabins, and they offer suggestions on what might be done to correct the problems. The work is professional, competent, and valuable as attested to by letters of appreciation included as an appendix in each report. And by the fact that the committee received a Presidential Citation last year from President Carter.

Judging by the quality of the work, these students must have spent considerable time investigating techniques of environmental science, not to mention the implications of environmental politics, especially with regard to the economic conditions in their city. Since Durfee High offers a course called "Ecology and Environmental Control" taught by the committee's advisor, Roger DuBois, I assumed that the students who developed the reports were products of the curriculum.

"Well not exactly," admits Janice Yee, a senior and current president of the committee, "You see, we can't really take the course, because we're mostly college preparatory students and our schedules are already filled by required sciences." So the committee meets during free periods, after school and on weekends and vacations. With the help (and not much of it, he insists) of Mr. DuBois, the committed group selects an area for each year's focus and devises an action plan. With no academic credit, no teacher hovering over them to make sure the work is completed, no outside pressure whatsoever, the members of the Environmental Control Committee carry out ambitious research projects. Why? "Well, once you get interested in these things, you sort of feel a responsibility to stay involved with them, and you want to see the projects get done," is one member's response. Last year their investigations were persuasive enough to convince a fair percentage of cottage owners around a pond threatened by sewage pollution to upgrade or replace their waste treatment systems.

In other years the committee has monitored the city incinerator's compliance with air quality standards, and analyzed industrial

pollution along one of the city's central waterways. The latter led the students to call in officials of the Environmental Protection Agency for an investigation. The agents claimed to have found no evidence of pollution severe enough to warrant any punitive action. The students weren't so sure. They had done their work well, and remained convinced that their data was accurate. So they went back to the river and did the entire study over again, checking samples and figures for the second or third time. They emerged from this with even more definite proof, and called the E.P.A. another time, offering the exact location and time of day of the illegal discharge. The mill installed anti-pollution devices and the students went home satisfied, with commendations from the state, city, and school.

What we have here is a case of environmental self-education, carried on by students out of a determination on their part to pursue exciting and relevant studies. Advisor DuBois, justifiably proud of these kids, suggests that in many cases the most worthwhile environmental education experiences may rise out of just this sort of self-starting activity. In previous years the committee was given a boost, and some added membership, by a special summer program offered to Durfee students in which they could earn extra science credits by joining a summer environmental sciences project. Lack of funds has terminated the summer program, and the committee is faced with the awesome task of gathering all the needed data without that extra lead time. Does this slow them down? Not a bit. In fact they seem more committed than ever, and they are recruiting new committee members from the "Ecology and Environmental Control" course.

Committee members usually sign up as freshmen or sophomores and stay through their entire high school career. They have acted as advisors to drop-outs, trying to re-interest them in school by getting them involved with hands-on environmental work. It takes a special sort of kid to stand up to a peer a few years older, and risk the stigma of being considered too "academic". The encounters were valuable, and one student seemed to speak for them all when he said "It was scary sometimes and difficult all the time, but we learned a lot."

Students who join the committee or take the "Ecology and Environmental Control" class become adept at field sampling techniques, using Hatch, Lamotte, and Millipore testing kits and learning standard lab procedures that could be useful to them in seeking jobs later on. But they learn something less obvious too: a healthy respect for the inherent balances in ecosystems and social systems. Because they must seek

out information where they can find it, they come into frequent and occasionally frustrating contact with state, local, and federal agencies. They begin to see the difference between individuals within organizations and the agencies themselves. This constitutes an education in some of the realities of the modern political and governmental process. Coupled with an ability to work in a group while accepting personal responsibility, it ought to prove most valuable to these students.

This year the committee is poking around yet another stream, checking up on pollution there which might be changing the purity of some recreational ponds downstream. They run into time and sampling problems, including at least one cold dip in the river, but now they're working overtime to get the bugs out of their testing system. And when they do, watch out!

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PROJECT AQUA  
WEST BOYLSTON

Cyrus Knight feels pretty good. The lamentable death of his mother has nearly doubled his wealth, and raised his rank on the town tax rolls from twelfth to third. Knight is a lawyer, his wife's name is Polly, and in 1845 he was the father of two children, the owner of a little livestock and no land at all. His mother's estate left him 105 acres of pasture land, forty-five acres of woodlot, nine horses, five swine, three oxen, two cows, a two-seater wagon, and a big jump in social status.

Edward Rivers on the other hand is not at all happy with events in his life lately. A young wagon builder working toward solid middle class respectability, Edward was the unfortunate victim of a fire over the winter. He lost his shop and home, and was forced to sell his only cow in order to survive. He watched his rank in the community plummet along with his economic fortunes.

And what of Adrich Seward, the quiet, self-possessed farmer? Adrich worked long on his acreage, slowly converting wooded land to tillable soil, and while his income was negligible and his personal wealth limited, he was isolated from the fluctuations of the economy and kept a stable position on the tax rolls.

We know all this because a computer told us. Knight, Seward, and Rivers are the alter egos of sixth graders in West Boylston. Project AQUA gives each participant a new identity. Material handed out to each student in the class is reminiscent of a television spy show, including all the pertinent information for their new characters: occupation, marital status, family size, income, savings, and rank in the community. Knight, Seward, and Rivers all live in a fictitious town, Waterbridge, during the mid-1800's and they come alive in the classrooms of West Boylston.

Their present incarnations as middle school students are unique in ways other than the fact that they've "come back from the grave." We know so much about their fortunes because these men, along with other residents of nineteenth century Waterbridge, have been programmed into the memory of a Wang PCS-II portable computer. The programs have been designed so that when changing social and environmental conditions are entered into the computer, the character's read-outs will change in response. So the students, who would normally have a hard time comprehending the effects of time and environmental manipulation on their lives, much less on the larger community, now have the unsettling experience of watching themselves, on paper, rise and fall as their fortunes fluctuate. History takes on a quite personal tone for young students who dis-

cover the inequity of fate as they see their friends inherit great wealth while they struggle with the aftermath of a fire.

The premise behind Project AQUA is that the computer simulation will help students to understand the long term effects of a political solution to environmental problems within a community in human terms without becoming consumed with memorizing facts and figures. West Boylston was an agrarian, pre-industrial town that underwent major changes when mills were built along the Nashua River. But those changes seemed small in comparison to what happened in 1895 when the Wachusett Reservoir was constructed, flooding six square miles of the town. With the passage of time what was at first regarded as a terrible loss came to be viewed as a great resource, when recreational opportunities offered by the reservoir became more valuable as the community was increasingly composed of workers no longer dependent on the land for a living.

This sort of history is shared by many Massachusetts towns, an ideal focus for a study of change and evolution made vibrant by its immediacy. But students may have problems with such a study: it can be very difficult for children in middle schools to collect, manage, and recall at will all the facts and figures involved in a study of this type. What tends to happen, according to Project AQUA's instigator and director Curtis Simpson, is that students end up devoting all their efforts to doing the busy work and miss the point of the lesson. Simpson wondered if there were some way to ease the information processing burden, thus allowing children to better assimilate the more valuable social and environmental learning.

Simpson's solution was the computer. The first step was the assembly of a data base upon which to build the computer models. Data was obtained from various sources, including the vital statistics of the Commonwealth of Massachusetts, old maps, and accounts of the period. The resulting composite, entirely fictional, became the primary data base for computer manipulation. For Curtis Simpson the development of the project has been a learning experience. He has learned computer science himself, and has discovered that he enjoys using the machine. His initial naivete proved to be a blessing in disguise--the materials developed are designed for instructors with a minimum of experience in computer operation. A high school science teacher and one especially talented high school senior have been very helpful in setting up his programs.

As the computer-managed simulation progresses, Project AQUA's students are afforded the opportunity to try increasingly complex models. What will happen to the community if a slaughterhouse is built along the river? How will that affect the farmer, the lawyer, and the



wagon maker? Whose interests will be best served, and whose ignored? The nicest aspect of the computer simulation is that the ever present "What could happen if?" is answered for West Boylston students in a matter of moments, when the machine spits out information. When students make their cases and argue their positions in a role play, they will know the results of their actions while the arguments are still ringing in their ears.

Simpson believes that an introduction to participatory democracy coupled with an overview of the town's current condition will give even younger students an understanding of the necessity for participatory democracy in solving larger environmental issues. As an added benefit they become comfortable with computer basics. For some the use of computers may seem incompatible with an environmental project, but Simpson insists that environmental education is more than the study of the birds, bees, and flowers. Project AQUA allows middle school students the chance to manipulate the political process in an attempt to solve environmental problems--thus leading to the development of citizens who will be environmentally responsible and politically aware.

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-- A Classroom Manual, including lesson plans and computer magnetic diskettes, is available.

## QUABBIN REGIONAL HIGH SCHOOL

The owl is almost invisible, its plumage so well matched to the mottled browns around it that even from just a few yards away students whisper "Is that it? Over there, under those branches?" The bird must be wounded, or it wouldn't allow us to come this close. The students are eager and curious but they keep a respectful distance, careful not to further upset it. The bird is a Great Horned Owl, biggest of New England's native owls, and it is staring out from the protection of a hawthorne thicket about five hundred yards behind Quabbin Regional High School, in Barre.

The students, staring back at the owl, are members of a class called "Conservation", a full credit science option for juniors and seniors. On this fall morning the class has been planting black walnut seedlings. Quabbin High is a registered tree farm, and students from the "Conservation" class do much of the work: class periods each week are spent outdoors, weeding and clearing, pruning apple trees or tending the Christmas tree crop. These young black walnuts were raised from seed by the class. Combining an active work program with lab and classroom study provides a well rounded conservation education.

We pause to observe the owl on our way back from planting. Owls do not drop in every morning, but teacher Bill Gauld tries to keep his students prepared for the unexpected. "You've really got to take initiative if you're going to get ahead," he lectured earlier in the day, and when the wounded raptor was reported on school grounds he hustled the class out to take advantage of the opportunity, a rare one, of seeing the owl close up. One of the nicest aspects of environmental sciences, Gauld says, is its unpredictability. Students are dealing with scientific method, chance, and real life. This morning Gauld told them he expected the survival rate for the trees they were planting to be quite high. "But," he added with a grin, "the rabbits might eat them all too."

Quabbin Regional High School is a relatively new school located near the huge Quabbin Reservoir in west central Massachusetts. The school has taken the unusual step of requiring that students complete at least two and a half credits in environmental sciences before graduation. In addition, Quabbin students are tested for competency in a range of disciplines, including environmental sciences, to assure that they have achieved minimum standards. Competency testing and minimum requirements have received much notice lately, but they've hardly ever been applied to the environmental arena. In fact, the study of science has been downplayed in many schools

in deference to expanded basic skills programs. Gauld calls Quabbin's approach "testing for basic survival skills for living in this world." Competency can be developed, and credits earned in several course offerings: "Conservation", "Man and the Environment", "Topics in Environmental Sciences", and "Field Biology and Ecology". The courses are directed at the entire school population, but a special effort is made to adapt to the special needs of two quite different groups: slow learners and exceptionally bright students. Environmental education, as an approach, is well suited to these dual jobs, offering a level of challenge that can be easily geared to differing individual abilities without restructuring entire courses.

In "Field Biology and Ecology" for instance, Quabbin seniors who elect to take the course divide into research teams. Each team delves into the environmental character of three different ecosystems near the school. They learn the frustrations and methods of field research while they are learning how to function well as independent yet interdependent members of a working group. When they have finished sampling for the fall, each individual student must write a research paper evaluating the scientific worth of the project and their own learning experience during it. These young people are learning more than science skills, though Bill Gauld claims that the hands-on quality of the environmental work has excited kids who would not otherwise be interested in sciences. They are finding out things about the fragile relationships between people and land. Studying their test plots behind the school, Quabbin students understand that they are working in a drainage area, and that water from this slope will eventually fill Barre's reservoir. They are less likely to pollute when they will be drinking the results.

Some of Quabbin's environmental studies options are vertically integrated, bringing students of differing grade levels into working contact with one another. Teachers from other disciplines, like art, history, and English, will often do complementary projects which help students to understand the role environment plays in our whole culture. Teachers in the program work hard, pushing themselves and their students to do the best possible job. "I trust the students with a lot of freedom," says Gauld, as the research teams filter into the woods, "and that trust is rarely abused."

Gauld is a strong supporter of the environmental science requirements at Quabbin and has devoted long volunteer hours to preparing teaching materials for the program. "I don't think environmental studies get the



treatment they deserve at most schools." he says, "Often they're seen as special, isolated activities. Here we see them as basic education, and essential." Gauld will admit to wishing he had more time to develop and refine curriculum materials. And he has trouble squeezing field work into class periods. "Running a tree nursery in forty-five minute periods is impossible," he says a little wistfully, "You just can't do it. But you do do it." He wonders how to properly test and evaluate the growth of the environmental consciousness he is trying to instill in the students at Quabbin. All he can do is try, and he says it's worth the effort.

Watching his class operate smoothly in the woods makes the reasons for his willingness clear. He is a teacher with a special situation in this beautiful rural campus and he has made the most of it, forming links with conservation agencies and extension agents to provide his students with a taste of real work experience in the woods, while offering a distinct community service to surrounding towns.

Not all teachers and schools will have these opportunities, but the example set by Quabbin Regional and Bill Gauld is a good one, taking environmental education seriously as a matter of course, and being ready to put in the work essential to making it happen.

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- Course outlines and curriculum guides for Quabbin's environmental studies courses are available, and an outline of the school's environmental science competency testing should be ready soon.



MUSEUM OF NATURAL HISTORY  
CAPE COD

If you cannot get the children to the museum then bring the museum to the children! This was essentially the attitude adopted in 1970 by the Cape Cod Museum of Natural History in Brewster, when that organization proposed to several schools on the Cape that a course of study in natural history and environmental sciences might be offered in the primary grades. The museum was incorporated in 1954 and their obvious connection with the Cape's natural resources suggested that it might be in the position to best design some formal plan of instruction, which the schools could then employ. Determining that this would indeed be valuable, and aided by a small grant from a local foundation, the museum went ahead with the development of a pilot effort that has since evolved into a twenty-four week unit of nature studies. Schools subscribing to the program number twelve, with approximately fifty class sections involved. The participating schools pay a minimal fee for instructional time, while the museum picks up the bulk of the costs.

The Environmental Science Program consists of a weekly visit to each class by a teaching naturalist from the museum's staff. Each week the instructor covers a distinct topic, general or specific: Reptiles and Amphibians; Trees of Cape Cod; Pond Life in the Fall; Marine Mammals; Fishes of Cape Cod; Trees in Winter; Planets and Stars; and Wings, Feathers, Feet and Beaks are representative titles. "What we're trying to do," explains instructor and museum director Donald Schall, "is inspire an interest in and respect for the natural environment." The program emphasizes contact with the outdoors whenever possible. Classes search the school grounds for animal tracks, moths and butterflies, interesting plants or trees. Students are taught basic identifying techniques, something instructors hope they'll take with them when they leave school, helping them to become more comfortable in the landscape. Field trips to the woods, the beach and salt marsh, as well as to the museum itself with its collections of artifacts and living creatures, complement the classroom work.

More than one aspect of this program seems exemplary. First, and likely most powerful for the students served, is the regular appearance of the museum's naturalists in the schools. This gives kids more than an academic experience of natural history, it is a chance to contact a person whose life is based on active work in this field. Few youngsters can imagine easily where an interest in nature might lead, and getting to know the museum naturalists can be as much of an educational opportunity as the subject matter itself.

As part of the process, students involved learn about what a museum is and how a museum staff operates, if only on some subconscious level. This is important. Educational director Bob Prescott says "Some kids get really excited just by working with a scientist. They haven't had any contact with working scientists before and in school they can get to feeling like they're oddballs, so being able to work with us is a real reassurance for them." Prescott directs a group of high school and junior high students on volunteer research projects at the museum. Many of these same students first learned of the museum by taking part in the Environmental Science Program while in grade school.

A second, equally compelling example set by this effort is that of an independent cultural institution actively involving itself with the schools of its community. While most museums, research facilities, and libraries will make themselves available to school groups on some level, few actually seek out the connection as the Cape Cod Museum of Natural History has. Don Schall explains the museum's rationale. "It's good for the museum. Winter is a slow time for us here; our attendance jumps way up for the summer months. We see our work in the schools as building an audience that will support the museum. When those kids go home after a class with us, we're the topic of conversation at supper. Their parents may not even know about the museum, but the kids do and they spread the word. Parents will take out family memberships because their children want to attend museum events and take part in museum activities, and then the parents will begin to come themselves. And it's good for us as teachers too; it keeps us in front of the kids, so we know how kids think. That makes our museum based classes better." There is no question that the in-school program costs the museum money, but the Board of Directors and the staff both believe that benefits far outweigh the cost.

Schall insists that the institution's interaction with the schools is mutually beneficial, easily arranged, and an asset to the community which could be duplicated elsewhere. He simply points out that reasonable limits ought to be set and observed. "Any other museum could do what we do, and it doesn't have to be a natural history museum..." Schall points out that a small community-based historic museum could provide exciting access to the cultural evolution of a place, which is surely a part of any environmental education.

Programs for next year are being redesigned to meet changing needs. But Schall is quick to assure that this does not signal any slackening of the museum's commitment to education, just an

attempt to find better ways of expressing it. He says the work with older students will expand, and he is working with school librarians to develop resource collections in the natural sciences that will be made available for student use. In addition, the museum is putting together natural science kits to be offered to teachers.

The school museum connection demonstrated by the Cape Cod Museum of Natural History would seem to have clear benefits to all.

#### CONTACT

Donald G. Schall, Director or  
Robert Prescott, Educational Director  
Cape Cod Museum of Natural History  
Route 6A  
Brewster, Massachusetts 02631  
(617) 896-3867

- The museum's teaching naturalists have created several teacher guides to the natural sciences. The museum publishes a newsletter and a quarterly magazine, The Cape Naturalist.



## THE ENVIRONMENTAL CENTER OF SPRINGFIELD

The Environmental Center of Springfield (E.C.O.S.) is housed in a big old barn-like building beside Porter Lake in the city's huge Forest Park. In winter the building is used as a warming shack for skaters on the lake. The main room is filled with displays: fish tanks and terrariums, dioramas, notice boards, and posters. They do not seem to attract much attention from the young skaters who pass in and out. This is probably due to the fact that if any of them have been through elementary school in Springfield during the last eight years they've already been well introduced to E.C.O.S.

Nearly eight thousand students a year take part in Springfield's Project E.C.O.S. Every 4th, 5th and 6th grader spends three days each school year at the center, which has a fully certified teaching staff of ten environmental instructors. The idea of E.C.O.S. is two pronged, as director Cliff Phaneuf explained recently. Primary in importance is giving Springfield kids a chance to become familiar with the outdoors and developing greater self-confidence in pursuing scientific study. The other key focus of the project is exposing students to Forest Park, a 750 acre public park located only a few minutes from downtown Springfield. Phaneuf hopes that kids who have participated in E.C.O.S. will have a sense of personal responsibility for this remarkable resource, eventually cutting the rate of vandalism there.

Project E.C.O.S. began when Springfield science supervisor Lorraine Ide designed a one-year pilot program in 1968, which ran with school funding. The success of this effort led to a Title III grant application by the city, and in 1970 the project was fully funded by this federal grant. The fact that it had already been operating successfully for a year meant that very little effort had to go into planning during that first funded year. The project was able to turn its full attention toward operation. Providing an experience for eight thousand students demands considerable attention! Of course not every community will have a chance to float a trial balloon like this, but the extra stability offered by this operating base seems to have really served E.C.O.S. well. Still, "I used to go out three nights a week," remembers Phaneuf, "I'd speak to any group, just trying to build support for the program." The necessity of building a strong local commitment even when the program has outside funding is too often ignored. Phaneuf realized that his Title III grant would expire eventually, and that then the project would have to operate with city

funds, so he set about making sure he got them.

For a student, much of the E.C.O.S. experience consists of being outdoors. The fourth grade concentrates on the interrelationship and interdependence of all things, exploring pond ecologies and the woods adjacent to the project office. Then in fifth grade, building on what they've already learned, they study adaptation, succession, and climax communities in forests. By grade six they are exposed to their own relationship to the outdoors in a very personal way, with units on awareness and survival skills, and some rudimentary orienteering games. This has turned out to have unexpected benefits. Phaneuf tells a story of three E.C.O.S. graduates who went hiking together when one fell and badly broke his leg. Drawing on what they learned at E.C.O.S. months earlier, his two friends splinted the break and carried the injured boy out, which his doctor allows may have saved the leg.

Student commitment to the program is high. Maybe too high. Phaneuf chuckles, recalling one child who was quite sick and faked good health in order to be allowed to go to school for the day, so that he could come to E.C.O.S. This excitement does not go unnoticed by parents and teachers, which Phaneuf points to as part of the strong foundation of financial and administrative support from the school department for E.C.O.S. "Teachers are always saying their kids are different when they're here," Phaneuf says. He actively encourages parents to participate with an invitation included on the information sheet mailed them before their children visit the project: "Give in to your own sense of adventure," it says. "Get into some old clothes, dress for the weather, pack a lunch and tell your child's teacher you'd like to accompany the class to E.C.O.S. for the day or the entire session! We look forward to having you join us!" Phaneuf is proud to note that nearly five hundred parents a year take him up on this offer, some coming back again and again. One even became a volunteer aide after her children had finished school.

The struggle to survive financially has added a special spirit to E.C.O.S. even if no one on the staff would want to have to hustle all the time. In trying to reduce the costs Phaneuf has learned to forage well. Asked if the program was financially comfortable he replied, "Comfortable? You're never comfortable. We scrounge a lot. There are some things you can't scrounge, but not many..." For pond studies he makes his own dip nets, at a cost of about fifty cents instead of six dollars from a supply house. The staff does its own janitorial work, and "borrows" their



building from the city's Parks Department. And everything gets recycled.

All too few federally funded environmental education projects last very long after their funding ends, and E.C.O.S. is a welcome exception. Phaneuf attributes the project's longevity to its broad base of support. Every student, including those with special needs, gets a chance to go through the program at Forest Park. A group that arrived in wheelchairs had no trouble; they measured out an acre by wheeling around the boundaries. "If they can make it in school they can make it here," Phaneuf says, and he knows. He taught handicapped classes before coming to E.C.O.S. He is proud of the project, and says happily that "Some of our sixth graders can give politicians a good argument on why to preserve parkland." That sort of thing gets noticed.

And supported. "Because we'd invited parents to participate in E.C.O.S., when the budget crunch came one year and the program was threatened we got eight hundred people out to a meeting to support us. I think that's essential," Phaneuf says, and he suggests that another way E.C.O.S. has solidified its position is by working well with school administrators and principals. "You've got to get administrative backing. If you don't have the principals you'll get nowhere. If they're behind you, you're a big step along the way. Bring them in early on the planning. And bring in the community too. Let them participate."

#### CONTACT

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Springfield Public Schools  
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Springfield, Massachusetts 01103  
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-- E.C.O.S. has a complete text and curriculum for the three grade levels it serves, as well as extensive resource collections.

## PROJECT ADVENTURE HAMILTON

Bob Lentz is tall and casual-looking. He does not go in much for formalities, offices and the like, and just now he is sitting on a kitchen counter talking about adventure, and Adventure. Lentz is director of a curriculum and program development effort called Project Adventure, run out of a recycled old girls' summer camp in Hamilton. Many of the environmental education projects included in this book owe a debt to Project Adventure, using components designed by P.A. or at least modelled after them. The P.A. staff has helped countless schools to create their own environmental or experiential education programs, and in the eight years since it began in 1971, P.A. has seen its philosophy of experientially-based education evolve from being treated with a suspicion bordering on hostility to being lauded as vital to innovative schooling. The project is largely self-supporting through revenues from the sale of its publications and consulting services, and teacher training workshops that have drawn audiences from across the country. P.A.'s answer to the question "What do you do when your grant runs out?" was to enter the marketplace. They've thrived there. While administrators everywhere worry about shrinking budgets and declining enrollment, Project Adventure seems to have found the right combination for success.

What does Bob Lentz say about all that? "Well, there's a good deal of luck involved in being in the right place at the right time." He's not downplaying the worth of the project or his pride in what it has accomplished, but he has a commitment to honest appraisal. He ought to. It forms the center of the Project Adventure method.

Before coming to Hamilton, Lentz directed educational programs for Outward Bound, which ought not to surprise anyone who knows much about P.A. The project began as an attempt to integrate the excitement and challenge of O.B. with the normal routine of a student at Hamilton-Wenham High School. The school's principal and its curriculum coordinator were excited by the possibilities of Outward Bound as a direct educational program, incorporated into the academics and physical education of their school. They applied for and won a Title III grant to "develop and implement pilot programs...to write sample curriculum units, and to collect evaluative data." In addition the proposal envisioned the project becoming a regional resource to local school systems. That is taken from a brief history included in P.A.'s excellent handbook, Teaching Through Adventure: A Practical Approach.

At first P.A. was wholly contained within the Hamilton-Wenham school district, but Lentz says that at no time did the project or the school's administration expect that sort of relationship to continue. He suggests that it might be a worthwhile exercise for those applying for grants to wonder what will happen when the grant runs out, if they get it. If the program is worth sustaining, and fighting for, then perhaps it isn't worth doing in the first place. Though P.A. is still administratively contained by the district, it is financially solvent on its own, accepting about 7% of its budget from Hamilton-Wenham. That is just about how much of their time is devoted to the local school too. Project Adventure is a part of the National Diffusion Network - a United States Office of Education Program that disseminates model programs on a national basis. Through the network, Project Adventure works regularly with teachers and school systems from Oregon to Georgia. Of course not every project will want to peddle its own wares away from the school it is based in, but the option is worth considering.

Project Adventure hit a streak of luck, as Lentz freely admits, because their earliest work with physical education caught on fast. The basic idea to this effort was that physical education can be used for more than just exercise, and that conventional athletics seemed to foster competition to the detriment of self-confidence and cooperation. The project devised "non-games" in which the goal was sharing rather than winning, and they introduced the ideas of outdoor education, especially the "Ropes Course", to a wide audience. The "Ropes Course" is a maze of lines, platforms, and swings built into trees or attached to the walls of a gymnasium, resembling a huge loosely-knit jungle gym. Students on the course execute problems that force them to confront physical challenge and personal fear, cooperating to get over obstacles, all of which equalizes most groups and helps to bring loners in. Breaking down the artificial boundaries and social barriers between students is a more important part of a ropes adventure than learning to scramble over a web of line.

"The phys. ed. component gives phys. ed. teachers a real option to running laps in a gym, and makes them feel like teachers for once," Lentz says. "And it's an effective way of dealing with high school kids. It gives them a chance to be physical, to overcome some fears, to learn and grow and feel a bit of delight." But Bob Lentz is adamant in saying that the project's real goals extend beyond innovative gym classes. The Adventure touch on an English course produced a creative writing unit in which students were taken rock climbing and asked to write about the



experience. A biology class mucks through a swamp. A social studies class gets lost in a big city. Project Adventure believes that students learn better when the thing being studied is about six inches in front of their noses, not written in a book. P.A. does not mean to imply that all conventional education can be done this way, only to urge that the option be considered. If traditional methods do not seem to be accomplishing their job, try something else. "Society says that the more you sit at a desk with a paper and a book, the more you're learning." Lentz says, "We're not trying to disprove that. We're trying to provide evidence of an alternative view."

P.A. is working now in the development of effective evaluation materials for experiential and environmental education. Lentz wonders what sort of measurable link can be made between experiential activities and academic growth, and how the link might be documented. He says "I'm convinced that the cognitive can increase through experiential work. I used to believe that it would be fine if the cognitive just stayed even because so much else of value was happening, but now I'm sure that the cognitive can be shown to measurably increase."

P.A. is concerned with process rather than product, and would not recommend a single pat formula for success. At the teacher training workshops that occupy much of the project's time, teachers' individual situations are considered in the development of specific frameworks they will be able to bring back to their own schools. "We're really only demonstrating process," Lentz insists "and our workshops are only successful to the degree that experiential attitudes get implemented by the teachers." Lentz happily boasts of a high degree of retention for P.A.-instigated program in schools, and says that teacher training is the only real way of changing things. Plug-in programs won't complete the critical transferral of capabilities to teachers and administrators.

Lentz is unhappy with the funding process, suggesting that it fosters too much isolation, too many short term projects and not enough full curriculum development. His suggestions: Go light on administration and heavy on trying things out. Do not be afraid to take chances. Make your projects site-specific, and start small, looking for incremental growth rather than a single big push. And do not get too caught up in planning. "A year to plan? A month is plenty. Planning should be done on the run, in a real situation with real kids. Too much planning makes you stale."

## CONTACT

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-- Project Adventure has a long list of publications and consulting services available, and the Project runs a regular workshop series. Teaching Through Adventure is a sensible, readable, and very useful guide to using some of the project's techniques.



PROJECT Q.U.E.S.T.  
BROCKTON HIGH SCHOOL

Brockton High School accomodates six thousand students in a huge, sprawling institution outside the city center. When the buzzer goes off to signal the end of a class period quiet hallways are instantly turned into seething, rushing rivers of teenagers, six thousand students trying to get from one place to another at once. This in itself is a significant environmental education, but it was not deemed sufficient by the Brockton teachers who collaborated in 1969 to write a Title III grant proposal setting up an urban environmental education project at the high school. Brockton is a small industrial city in eastern Massachusetts, and its high school is a microcosm of the city. The chance to capitalize on these similarities in teaching values and basic skills encouraged the faculty to create Project Q.U.E.S.T. (Quality Urban Environmental Studies and Training).

Environmental education need not be confined to rural areas, as Q.U.E.S.T. students know, because Brockton is a city, and a city has its own environmental characteristics and concerns. The Q.U.E.S.T. model can be applied to any medium sized city, and it is deceptively simple: Teach students skills which get them involved in the dynamics of their own community, and start close to home. In school. Sounds simple enough, but carrying it out has taken a lot of effort from a dedicated staff, and a lot of initiative from the students.

Gerry Beals, a teacher of high school science, was one of the original developers of the Q.U.E.S.T. plan. He traces its earliest heritage back to the educational climate following World War II, boom years when population and economic expansion in America were responsible for the disappearance of the study of natural resources from schools, and an ignorance of the importance of planning or demographics. The impact of rapid technological growth passed schools by until the late 1960's. Q.U.E.S.T., Beals explains, was designed to fill the gap. The hope is that students educated to the environmental and social factors governing a city's growth will be better prepared to understand and participate in that growth. For cities like Brockton which have sustained boom and bust cycles and face high unemployment, these issues are not idle ones.

The project is broken into two levels, Q.U.E.S.T. I and II. Q.U.E.S.T. I is a prerequisite to the second level, and it is made up of thirty nine day teaching cycles, each cycle including three thirteen day modules. Each smaller module centers on one of the core disciplines included in Q.U.E.S.T. Students

are questioned on their own environmental attitudes, and asked to examine historical attitudes toward the land and energy resources in America and in their own city. During the course of the year they will be exposed to such diverse analytic tools as: "Planning and Engineering Science," "Introduction to Statistics," "Regional Economic Environment," "Social Problems in the Urban Environment," "Introduction to Programming," "Micro-Graphic Analysis," "Environmental Law," and "Water Analysis" (these representative titles are from the Q.U.E.S.T. curriculum guide). Students become capable researchers, learning the necessary skills to collect and interpret data. Computer sciences and statistics are important, but so are social values, a sense of history, and a willingness to compromise.

The mix of technical skills and attitude shaping is evident in the projects students have done. The second level of Q.U.E.S.T. is centered on independent projects, and Q.U.E.S.T. II members this year are building a working model solar heating panel, and redesigning a dish type solar cooker built by an earlier class. In the past, students have attempted such ambitious tasks as surveying Brockton's waterways and producing a report of planning and building options. The program's base of support is cemented by the students' willingness to complete valuable municipal projects. An inventory and mapping of the exact location of city storm drains and hydrants along with an assessment of the possible overflow danger of culvert reduction points are two such efforts, and both are being planned in cooperation with the Public Works Department.

Q.U.E.S.T. staff and students have gleaned some critical lessons in the value of public relations. The project tries to keep its actions in view, especially in the school itself. In one year the project sponsored a school-wide design competition on energy conservation, convincing a department store and some small businesses to donate prizes, and inviting the representatives of these stores to serve as judges. Q.U.E.S.T. students have organized a contest in local elementary schools annually in which children make Christmas tree ornaments from recycled materials, and then they ask tree dealers to donate trees on which to display the results. Last year's Q.U.E.S.T. II group did an extensive survey of Brockton High student attitudes on energy conservation. The class designed a publicity campaign to encourage better conservation practices in the school.

Q.U.E.S.T. students will do soil testing for area gardeners, and when the Massachusetts Association of Conservation Commission held their yearly conference at the school, fifty Q.U.E.S.T. students volunteered their Saturdays

to help run the event. That is the sort of commitment that builds credibility for a program. Peer teaching with younger students is no longer the required part of Q.U.E.S.T. that it once was, "But almost all of the students do it," says project director Maurice Donnelly, pointing out that his students are currently working with special needs classes in the high school, a challenging and expanding encounter.

Project Q.U.E.S.T. takes a lot of effort from the staff, and working on the student projects takes extra time and commitment, but there is no lack of this at Brockton High. "We've enough projects planned to keep us going for several years," says Donnelly, "As long as the program benefits the students, and the community, we'll keep going."

#### CONTACT

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Brockton High School  
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- Q.U.E.S.T. has designed curriculum aids of many varieties, and has a thorough Environmental Studies Curriculum which encompasses the Q.U.E.S.T. program, in booklet form.



PROJECT S.C.O.P.E.  
ROCKPORT HIGH SCHOOL

If you lived in Rockport, a small town on the coast north of Boston, and you had a craving for a dozen farm fresh eggs, you wouldn't have to visit the supermarket. Instead you might head up to Rockport High School, where students participating in the school's Project S.C.O.P.E. (Satellite Classrooms: An Outdoor Program for Education) raise chickens and eggs for sale.

In 1974 students in a class on conservation techniques complained that they spent too much time talking about conservation and rarely got out of the classroom to actually work in the landscape. The school is located in a rural setting at the edge of town, and flanking the grounds were two farms. As it happened both farmers were facing serious problems as a result of high taxes and a diminishing market for their products. When one of them was approached by a group from the high school and asked if he would be interested in working with school groups on a special agricultural and environmental education project that would use part of his farm, he consented to the unusual offer and Project S.C.O.P.E. was born.

With funding under Title IVC Rockport High School contracted with farmer Kenneth Rowe for the use of his barn and milking herd. A greenhouse kit was purchased and assembled on school land. Compost bins and coldframes were built by the students, and a vegetable garden was planted. The school also established a chapter of Future Farmers of America.

Students who enrolled in S.C.O.P.E. were provided with a dual focus. First, biology, plant and animal sciences, and general ecology were taught in the classroom as academic (albeit quite practical) disciplines. Then all of these were put to direct use in the field, and often in long hours after school, as students struggled with many of the same hardships that had nearly sunk Kenneth Rowe. With the help of their staff advisors, S.C.O.P.E. students designed the program for each semester. Before each term, a student would meet with the staff to determine individual educational goals for the time period ahead.

The opportunity to work with real plants and animals had a compelling effect on students, and marketing what they produced caused them to confront the realities of farming in a way that no class discussion could. They began to take real responsibility for the program. When a bit of vandalism occurred students sought out the offenders and collected damages from them. In another case the CB radio used

to keep the garden and barn in contact with the project's office/classroom was stolen. Students in the program discovered who had taken it and forced the thief to return the instrument, in person, to project director Phil Perry. Perry, science director at Rockport High and the moving force behind S.C.O.P.E., says that even though some program members end up transferring to a local agricultural and technical school, just as many will end up going on to college, including some who went into the project without college preparatory plans. "I think we're educating for attitudes more than anything else." Perry explains, "There are a lot of ways you can teach citizenship and pride. A farm or garden is one good way, and it seems to be working for us."

When initial funding for S.C.O.P.E. ended the town's school committee threatened to terminate the effort. Students and S.C.O.P.E. staff were upset, and went to work to prove that something more than farming was happening in the trailer/classroom behind the garden. They rallied more than three hundred parents on their behalf, crowding into a school committee hearing on the subject. Both budget and staff were cut, but the project survived in a reduced form. Then in 1976 a freak windstorm collapsed the geodesic dome that served as S.C.O.P.E.'s greenhouse, and students saw much of their hard work collapse with it. Kenneth Rowe's dairy herd dwindled to a single cow, but the spirit behind the S.C.O.P.E. idea never faltered. In a way, all this adversity has taught a valuable lesson about determination and survival.

The project licked its wounds and began to rebuild. Salvaged materials from the old greenhouse will become a new one. The project has weathered loss of funds, storms, staff changes, and still survives. It expects to survive for quite awhile. Says director Perry, "I think we're starting to be seen as an integral part of the education around here."

CONTACT

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Science Director  
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-- S.C.O.P.E. has many well written guides to using specific farming and gardening activities in an academic setting.



### III

## PROGRAM ABSTRACTS

The following short descriptions of EE efforts at schools throughout the Commonwealth, are intended to stimulate communication. By providing descriptive abstracts and addresses we hope to spur those working in the field to connect their efforts, and to offer a framework into which someone just entering the field might place their own proposed work.

#### 1. AMHERST REGIONAL HIGH SCHOOL

The science department offers an elective course in "Environmental Sciences" and the social studies department provides "Technology and the Environment". The first is strictly scientific, while the second considers the relationship of politics and social or cultural affairs to environmental decision-making. Taken together they provide a strong EE. An "Alternate Energies" course looks at all forms of energy production comparatively. In one biology course a series of thirteen local field experiences has been substituted for labs, placing an emphasis on understanding the immediate environment.

Contact: James Scott  
Science Department  
Amherst Regional High School  
Triangle Street  
Amherst, Massachusetts 01002  
(413) 549-3710

#### 2. AMHERST REGIONAL JUNIOR HIGH SCHOOL

Seventh through 9th grades offer sciences with an environmental base, including extensive outdoor work examining the surrounding countryside. The standard 9th grade science offering, "Probing the Natural World", studies essential concepts of environmental science, and one teacher has worked with a local nature center to devise the "Ecology Box", a curriculum adapted to local conditions, centered on discovery.

Contact: Gail Stilson  
Science Department  
Amherst Regional Junior High School  
Chestnut Street  
Amherst, Massachusetts 01002  
(413) 549-3975

#### 3. A.N.I.M.A.T.E.

Animals and Nutritional Information Modifying Attitudes Toward Education is a project geared

for low success or potential drop-out students. It presents a variety of possible vocational choices while graphically illustrating both the need for good personal health habits and the connections between personal and social well being. Students work with farm animals during the school day.

Contact: Carolyn Tolman  
Leominster High School  
Leominster, Massachusetts 01453  
(617) 537-9511

#### 4. ASHLAND EDUCATIONAL COMMUNITY CENTER

The community education wing of Ashland High School has established a biological farming project, setting up a community garden worked by students. Produce is sold to cafeterias, community members, and local restaurants. The program currently exists only as a summer employment effort funded by C.E.T.A. and Neighborhood Youth Corps, but the staff hope to expand the gardening project into a high school curriculum, and a resource for teachers.

Contact: Jackie Borck  
Ashland Educational Community Center  
Ashland High School  
Ashland, Massachusetts 01721  
(617) 881-4414

#### 5. B.E.E.P.

The Bedford Environmental Education Program is a curriculum pilot project designed jointly by staff in the Bedford schools and environmental education specialists from Elbanobscot, Inc. The program will establish comprehensive programs in Bedford at the elementary level. Materials and results of the pilot are currently in preparation.

Contact: Cricket Boyle  
B.E.E.P. Director  
Davis School  
Bedford, Massachusetts 01730  
(617) 275-6804

#### 6. BELMONT ELEMENTARY SCHOOLS

Two fourth grade teachers in a Belmont school have written a complete and easy-to-follow lesson plan and guide to nature studies, called "Environments". Based on SCIS environments unit, the plan uses some concepts from that text but isn't entirely based upon them. Directed at the specific conditions around their school, the plan could be applied in most any schoolyard environment.

Contact: Patricia Dwyer, Carol Gay  
Wellington School  
121 Orchard Street  
Belmont, Massachusetts 02178  
(617) 484-8668

#### 7. BROOKWOOD SCHOOL

The school's outdoor program draws on some aspects of the Project Adventure model (ropes courses, challenge and reward through physical activity) and blends them with an environmental awareness program to provide a broad-based educational effort, demonstrating that even transitional grade students at grades 6, 7 and 8 can benefit from an outdoor environmental challenge, not just high schoolers. The school has trip descriptions written up, and offers consulting services and the use of its facilities.

Contact: John Dyett  
Brookwood School  
Brookwood Road  
Manchester, Massachusetts 01944  
(617) 526-7596

#### 8. CAMBRIDGE SCHOOL OF WESTON

In addition to a diverse outdoor adventure and exploration program conducted as part of the physical education department, this school offers a "Global Perspectives" elective course for sophomores, tying energy, environmental, political, social, and cultural issues into the development of a wholistic world view. The school is also seeking funding for a projected dormitory residence, called "Life-dorm", a live-in learning laboratory for students using alternate energy sources.

Contact: David Hursty  
Director of Development  
Cambridge School of Weston  
Weston, Massachusetts 02193  
(617) 893-5555

#### 9. CARROLL SCHOOL BOUNDERS

The Carroll School offers an outward bound-type program, sponsored by the Hurricane Island Outward Bound School, specially designed and implemented to meet the needs of dyslexic or perceptually handicapped children, ages eight through fifteen. The idea involves using controlled outdoor challenge to help overcome physical or emotional handicaps brought on by perceptual problems. The school offers apprentice training and consulting services in its program, and makes equipment available to other groups on a barter or exchange basis.

Contact: Michael Stratton  
Carroll School Bounders  
Baker Bridge Road  
Lincoln, Massachusetts 01773  
(617) 259-8342

#### 10. CONCORD ELEMENTARY SCHOOL

Concord has implemented a locally developed and directed environmental curriculum for grades K-6. Using school grounds and surrounding natural areas, and depending on a carefully maintained and trained corps of volunteers from the community for instructional support, the program is science oriented but not restricted to that subject. Starting with simple schoolyard exploration and gearing up to an eventual study of a sewage treatment facility within a natural wildlife area, students become familiar with ecological concepts and their social ramifications. All materials have been developed by the school system.

Contact: John Benjamin  
Concord School Department  
115 Stow Street  
Concord, Massachusetts 01742  
(617) 369-9500

#### 11. GATEWAY REGIONAL HIGH SCHOOL

Gateway is a rural school offering students a variety of environmental course possibilities. "Forestry" acquaints them with the plant and forest sciences, management practices, and product uses, including work in the woods and visits to managed forests and sawmills. "Limnology" explores testing techniques and water pollution issues. "Economic Botany" is essentially a course in the identification and use of edible wild plants. The purpose of these offerings is to familiarize students with the local environment, creating respect and responsibility.

Contact: Kenneth Barrows  
Science Chairman  
Gateway Regional High School  
Littleville Road  
Huntington, Massachusetts 01050  
(413) 667-5767

#### 12. GLOUCESTER HIGH SCHOOL

Gloucester's museum school program is a special counselling and activity-oriented effort to handle students who have left school, been suspended, are potential drop-outs, or do not function well in the school system normally. One major component of the museum school is outdoor exploration, especially rock climbing



and dory trips along the coast. Students in the program learn not only to handle themselves confidently in the outdoors (which will hopefully let them move back into the general school population with similar confidence) but to build the dories they sail. All boats used by the program have been built by students there.

Contact: Jerry Hart  
Learning Options Coordinator  
Gloucester High School  
32 Johnson Road  
Gloucester, Massachusetts 01930  
(617) 281-2870

### 13. GREATER BOSTON RESOURCE PROGRAM

A program in a Belmont elementary school brings suburban children into closer contact with Boston, exposing them to the city's institutions and systems in a simple and non-threatening manner. Field trips to cultural institutions are preceded by extensive in-school study, in which young students play games, make models, and draw and study maps to develop an understanding of the institution they'll visit. Travel to and from is usually by public transportation, to acquaint students with another aspect of the urban scene.

Contact: Carol LaFontaine  
Daniel Butler School  
Belmont, Massachusetts 02178  
(617) 484-3519

### 14. H.U.E.S. PROGRAM

H.U.E.S. (Historical and Urban Environmental Studies) is jointly sponsored by Boston University's Human Environment Institute and the National Park Service. It is an experimental effort to provide thoroughly researched and planned urban environmental field experiences for schools, with a special emphasis on the growth and cultural development of cities. Students participating in a H.U.E.S. project will be prepared by their own teachers and the H.U.E.S. staff beforehand, then they'll explore an unusual part of Boston in depth. The point is gaining an understanding of the complex social and environmental make-up of an urban center, and the evolution over time of such a place. H.U.E.S. services are available to any school, and the program is centered in the Boston National Historical Park.

Contact: Ellen Fineberg, Coordinator  
H.U.E.S. Program  
Boston National Historical Park  
Charlestown, Massachusetts 02129  
(617) 242-3135

### 15. LINCOLN-SUDBURY REGIONAL HIGH SCHOOL

Several science electives are environmentally based, but one in particular, periodically offered to juniors and seniors, is "Environmental Issues", a multi-disciplinary examination of overpopulation; air, water, and noise pollution; ecology; energy; town and community planning; and food and nutrition. The course attempts to focus attention on large scale issues by examining the immediate surroundings with field trips and the inclusion of outside speakers.

Contact: Betty Busiek  
Science Department  
Lincoln-Sudbury Regional High School  
390 Lincoln Road  
Sudbury, Massachusetts 01776  
(617) 443-9961

### 16. MASCONOMET REGIONAL HIGH SCHOOL

An environmental science program here meshes with an outdoor and experiential adventure effort, including extended dory trips and camping, while studying the local landscape. Primary attention is given to examination of the seashore and human interaction with the sea, marine studies, and sciences.

Contact: Larry Uhrich  
Masconomet Regional High School  
Endicott Road  
Topsfield, Massachusetts 01983  
(617) 887-2323

### 17. MILTON ACADEMY

Middle school students here worked alongside faculty advisors to build a solar heated greenhouse and laboratory called S.E.A.L. (Students Exploring Alternative Lifestyles). S.E.A.L. studied environmental policies and the effects of pollution, and considered the possibility of life without fossil fuels or common conveniences. Now the greenhouse is used as a lab and classroom for the school's environmentally based science curriculum.

Contact: Jack Barber  
Science Department  
Milton Academy  
Milton, Massachusetts 02186  
(617) 698-7800



## 18. MILTON PUBLIC SCHOOLS

Sixth graders in Milton are provided with a residential, four-day outdoor environmental experience at a rural site, where they participate in academic, adventure, and athletic activities. Program staff would be happy to share their experiences with other schools attempting such an effort.

Contact: Paul Scopa  
Elementary Science Coordinator  
Milton Public Schools  
381 Centre Street  
Milton, Massachusetts 02186  
(617) 696-7220

## 19. MOUNT GREYLOCK REGIONAL HIGH SCHOOL

The "Community Studies" program at Mount Greylock combines science, social studies, and history in an intensive, cross-disciplinary effort. The program is open to sophomores who can commit the final four periods of an eight period day. The students take significant responsibility for the organization of the course as active participants in field trips, peer teaching, group projects, and independent work.

Contact: Mitchell Backiel  
Mount Greylock Regional High School  
Cold Spring Road  
Williamstown, Massachusetts 01267  
(413) 458-8164

## 20. NATICK COMMUNITY FARM

A social service project in Natick has established a working farm run by young people, with a garden, animals, and a maple sugaring operation. The farm is extensively used by schools for field trips, and the farm staff have developed extensive study guides, materials, and explanatory texts to accompany the visit. Staff works closely with Natick schools, which has enabled some students to complete independent or work study projects at the farm.

Contact: Mark Winne  
Natick Community Farm  
10 Wilson Street  
Natick, Massachusetts 01760  
(617) 655-5858

## 21. NATICK HIGH SCHOOL

Natick High has built its own nature trail, and offers a second year advanced biology course centering on environmental and outdoor study. The class examines and analyzes environments surrounding the school, including a large pond on school grounds, and studies water, air, energy, conservation, and recycling issues. Staff is very willing to share their work with others.

Contact: Charles Bohannon  
Natick High School  
15 West Street  
Natick, Massachusetts 01760  
(617) 653-0550 X214

## 22. NEEDHAM PUBLIC SCHOOLS

Needham has attempted to infuse a broad-based environmental emphasis into the science education in their schools, using an outdoor natural studies area as well as the school science center. The staff has developed curriculum and study guides for an environmentally based approach to ecology, biology, and chemistry.

Contact: Peter Nelson  
Director of Science  
Needham Public Schools  
609 Webster Street  
Needham, Massachusetts 02194  
(617) 444-4750 X40

## 23. NEWTON JUNIOR HIGH SCHOOL

One of the oldest and best established outdoor education efforts in the state, Newton Junior High School each year offers students a mountain hiking program closely tied into the school science effort. A rigorous climb in New Hampshire's White Mountains is accompanied by a thorough and diverse curriculum package exploring everything from ethics to survival science. The resource packet designed and written by staff and teachers from Newton is comprehensive, covering details of all sorts as well as curriculum options. (See listing in Resources section of this publication.) Staff has accumulated valuable experience in operating outdoor education activities.

Contact: Bill Redomsky  
Newton School Department  
265 Watertown Avenue  
Newton, Massachusetts 02158  
(617) 552-7621

24. NEWTON NORTH HIGH SCHOOL

Science education at Newton North has broadened into other disciplines and concerns, including a course on greenhouse management taught in the school's own facility which prepares students for possible employment in a horticultural profession while teaching basic plant sciences. An environmental chemistry offering emphasizes testing techniques and the use of monitoring equipment, as well as essential chemistry information. An extra-curricular biology club has evolved into an ecology action organization, undertaking community projects and an advanced placement biology elective. The staff has developed extensive resources and related curriculum materials.

Contact: Harold Wiper  
Riley House  
Newton North High School  
Newtonville, Massachusetts 02160  
(617) 522-7459

25. NORTHAMPTON ELEMENTARY SCHOOLS

Local CETA funding was used to hire two environmental consultants who worked with teachers and administrators to develop curricula and materials which expanded students' contact with environmental studies. Consultants led field trips, initiated and supervised garden projects, wrote study guides for open space use, and collected materials. The elementary science department functions as a resource center for teachers interested in infusing an environmental aspect into their work. A locally developed curriculum guide encourages use of local resources. Funding cuts threaten future use of consultants.

Contact: Fred Morrison  
Elementary Science Coordinator  
D.A. Sullivan School  
Williams Street  
Northampton, Massachusetts 01060  
(413) 584-9596

26. PEABODY PUBLIC SCHOOLS

Sixth graders in Peabody spend five consecutive school days at a piece of conservation land where they're exposed to the basics of environmental science in a first hand way. In junior and senior high school students have the option to continue their environmental education by using a greenhouse on campus or participating in elective environmental science and ecology course offerings. The school makes active use of town conservation

land, including a two-hundred acre orchard. The intent is an integrated environmental effort within the curriculum, not an added outside project.

Contact: Edgar N. Johnson  
Educational Director of Health  
Peabody School Department  
Peabody, Massachusetts 01960  
(617) 531-1600 X129

27. PIONEER VALLEY REGIONAL SCHOOL

The standard 7th grade science curriculum has been replaced by an environmental studies program at this junior and senior high school. The school has developed a pond and nature trail on campus as teaching aids, and the whole science curriculum has an environmental emphasis concerned with local situations. The high school also offers a semi-vocational "Careers in the Outdoors" course which familiarizes students with what's involved in vocational options such as forestry, sewage and waste treatment, and landscaping. Students from this course have built and are using a sugar house on campus.

Contact: John T. Callahan  
Pioneer Valley Regional School  
Northfield, Massachusetts 01360  
(413) 498-2931

28. PITTSFIELD PUBLIC SCHOOLS

The Pittsfield school department's science coordinator led the development of a strong environmental emphasis in Pittsfield schools. Working with teachers from the junior high, a text for 7th grade science was developed with a locally oriented environmental approach. In addition, the schools have a formal arrangement with local nature centers (Audubon sanctuary, Berkshire Garden Center) involving regular field experiences and instruction by naturalists. This consultant instruction is alternated with regular teacher work, providing a variety of offerings and a stimulating pattern for students.

Contact: Anne Nesbit  
Science Coordinator K-12  
Pittsfield, Massachusetts 01201  
(413) 499-1234



### 29. PROJECT BLUEBERRY

Not strictly environmental in focus, Project Blueberry is a novel effort funded under Title IVC. It combines an English course with the use of cable television production equipment, ending up a "Foxfire"-type video product. Students in the course pursue community studies and history projects, researching aspects of their own cultural history and that of their neighbors, while learning to use video equipment. Eventually they produce several documentary programs for local cable television airing, which bring alive the cultural environment of the area.

Contact: Mark Caron  
Project Blueberry  
Hampden-Wilbraham Regional Schools  
621 Main Street  
Wilbraham, Massachusetts 01095  
(413) 596-9011

### 30. PROJECT ENTERPRISE

This project attempts to give students a tangible understanding of some of the academic subjects they're studying through work experience. Historic preservation, carpentry, and actual renovation of an old house enhance local history. Forestry, and farm and orchard work enliven science. Water pollution research and application of skills are locally based. Students gain access to professionals in a field while still in school.

Contact: Thomas Parker  
Project Enterprise  
Marshfield High School  
Marshfield, Massachusetts 02050  
(617) 837-1161

### 31. PROJECT EXPLORATION

This multi-disciplinary resource center is involved in a wide range of school activities: designing new courses in conjunction with teachers, operating field experiences, administering a student produced journal of community history, and serving as a center for innovative ideas.

Contact: Paul McGowan  
Project Exploration  
North Middlesex Regional Schools  
Main Street  
Townsend, Massachusetts 01469  
(617) 433-5309

### 32. PROJECT M.U.N.C.H.

Primarily concerned with health and nutrition education, the project explores the connections between nutritional habits and environmental attitudes. Students are given the opportunity to participate in school menu planning, food ordering, and meal serving. Waste is studied and questions of food scarcity are addressed, causing students to begin looking more carefully at their own place on the food chain. M.U.N.C.H. uses nutrition to "accomplish our goals of educating children to be physically well beings with a respect for the environment."

Contact: Duncan Stewart  
Project M.U.N.C.H.  
Oakum Center School  
Coldbrook Road  
Oakham, Massachusetts 01068  
(617) 882-3392

### 33. QUINCY PUBLIC SCHOOLS

For some time Quincy science education has had an environmental emphasis, with a recent occupational education grant bringing a project in sewage treatment and pollution control to the high school. Quincy is currently putting into operation a new elementary level curriculum, Project I-C-E (Instruction-Curriculum-Environment), an interdisciplinary environmental studies project nationally developed but applied for the first time this year in Quincy.

Contact: Vincent P. Sullivan  
Coordinator of Science  
Quincy Public Schools  
Quincy, Massachusetts 02169  
(617) 471-0100

### 34. SANDY NECK ENVIRONMENTAL CURRICULUM

A Coastal Zone Management Commission grant, along with regular school funds and support from the town conservation commission, helped a Barnstable High School biology teacher to design and execute a detailed marine science research project near the school. Students were instructed in, and performed, all basic research tasks. The concentration was on the interaction of human and coastal environments, and results of the study were made available to the C.Z.M. Commission. The school hopes that this may be a prototype for using students as research assistants on projects of real demonstrable value. A curriculum package is under development.



Contact: Peter Auger  
Barnstable High School  
774 West Main Street  
Hyannis, Massachusetts 02601  
(617) 775-2600

### 35. UMBILICUS PROJECT

Aggressive fund-raising and dedication by a few faculty members at a private school has resulted in the construction of a unique educational facility, called "Umbilicus". The space is a greenhouse wing attached to the biology room, containing equipment needed for indoor solar aquaculture, experimental planting beds, solar panels for hot water heating, a rock storage system to preserve heat, a windmill for electricity production, and a computer link-up to monitor all operations. Students perform experiments in "Umbilicus", and many participate in an elective course called "Biosphere and Ethosphere" which explores the role of culture and society in determining biological decisions.

Contact: Fred Sculco, Director  
Umbilicus Project  
Noble and Greenough School  
507 Bridge Street  
Dedham, Massachusetts 02026  
(617) 326-3700

### 36. WAYLAND HIGH SCHOOL

Special funding from local school monies for staff and curriculum development, has given Wayland teachers the opportunity to create innovative educational options. The junior high offers a four-day residential environmental experience, and a challenge and survival physical education course which takes an extensive canoe trip each year. A ninth grade project uses Project Adventure techniques to build confidence, personal pride, and social responsibility. An eighth grade course involves urban METCO students and Wayland residents in examining natural and cultural environments of their respective communities. A biology class concentrating on water compares findings from an oceanographic field trip to those made on the local Sudbury River.

Contact: Andrew Platt  
Assistant Superintendent of  
Curriculum  
Wayland School Department  
57 Cochituate Road  
Wayland, Massachusetts 01778  
(617) 358-7728

### 37. WELLESLEY HIGH SCHOOL

Begun out of the independent study of one senior some years ago, Wellesley High School boasts a student operated and maintained garden plot, using all organic methods, on two acres of town owned land within walking distance of the school. Students collaborated with a teacher to design a horticulture curriculum which will be used in the school next fall, and are currently lobbying for funds to construct a greenhouse. Seniors make use of an alternate semester independent study elective to work full-time in the garden or take internships in related areas.

Contact: Science Director  
Wellesley Youth Farm  
Wellesley High School  
50 Kingsbury Street  
Wellesley, Massachusetts 02181  
(617) 235-7618

### 38. WESTFORD ACADEMY

"Environmental Planning" at Westford Academy is an unusual high school elective that teaches skills planning, resource analysis, and graphic presentation. The entire year is devoted to a single group project, performed by the class as if they were on contract to an actual client: their own town.

Contact: Joseph Freitas  
Westford Academy  
Patten Road  
Westford, Massachusetts 01886  
(617) 692-2551

### 39. WILBRAHAM TRANSITIONAL SCHOOLS

Grades 4-6 in Wilbraham have the opportunity to study a combined offering in health and environmental studies. The environmental education teacher and health teacher switch off with one another, each taking a quarter semester. The two areas are related for children by an emphasis on the connections between personal health and environmental conditions. Schoolyard exploration, elementary examination of pollution and ecology issues, and frequent contact with environmental news stories prepares children early for a better understanding of the importance of environmental quality.

Contact: Adolph S. Jurczyk  
Soule Road School  
Wilbraham, Massachusetts 01095  
(413) 596-9313





## IV RESOURCES

*"Something old, something new, something borrowed, something blue..."*

And something useful too, we hope. The old double bind of environmental education, that broadness of focus which is both liberating and frustrating for its liberating effect, rears its head again when we go out looking for resources for environmental education. On the one hand resources are everywhere. This pat, over-simplified solution does have some truth in it. There is nothing essential to teaching environmentally other than a willingness to try things and look carefully at the world around you. But that world might be anything from a school classroom to a mountain range or salt marsh, to your state, this country, the entire world or universe. There are no limits. Nothing is too small, and nothing too big if approached for applicable lessons.

Starting is a difficult proposition. You may have a great notion of what to do but no idea at all of how to do it. You might have some difficulty overcoming the suspicion that, even though you are possessed of an exciting and dynamic idea, you are missing the "training" or "background" you need. This book has tried to present a collection of differing approaches, and it has tried as well to dispel the image of environmental education as requiring extensive facts or materials. Still, you cannot make a cake from air or a house without lumber. The following section hopes to provide you with some tools.

Education somehow always gets back to BOOKS. We have included a number of different sorts of books in this bibliography. Some are nuts and bolts manuals on how to get started, keep going, or change your direction. Some are other guides to resources, and even guides to guides! Still others are less specific and concern themselves with the reason for teaching environmentally in the first place.

MAGAZINES and PERIODICALS are a lively, timely way of keeping what you teach well linked to current events. Many publications offer special school reprints of certain articles. Different journals speak to different audiences, and we have selected a couple that seem frequently to have good coverage of environmental issues, and that might make interesting material for a class discussion or project.

Support is very important when starting something from scratch. You wonder whether anyone else has done anything like it, and if so what their experience was. Backing can come

from members in the ORGANIZATIONS and INSTITUTIONS included in this resource section. They are established precisely for the purpose of sharing among interested teachers and staff, skills, experience, enthusiasm, hunches and hopes, information and inspiration.

Finding a continuing source of background material for your work, once you have decided to do it, can be another stumbling block on the route toward a smoothly functioning program. Very few of us have time to sift through all the information easily available for that which is actually useful, determining what would be applicable for the next term's class, designing a brilliant new course of study each semester. Yet it is important to keep the material fresh, the exercises new and stimulating, if only to maintain our own interest. How can things be kept current and lively without sufficient time? One answer is to ask for help, and the cultural institutions, resource centers and assistance groups gathered in this section should produce good results. Of course there is not enough room here to list every possible source, so we have included guides to these places as well. The important thing is the realization that there are people out there whose job it is to help you out. Use them!

Sooner or later it seems as if every educational program with the word environmental attached to it will want to go out into the field, whether that be sylvan wilderness or the Combat Zone. Environmental education is inherently prone to field tripping. As every teacher can attest, this is a mixed blessing. Yes, a good field trip may create lasting interest in a subject and reawaken deadened students. But a field trip which begins as a bright idea may end up as a nightmare. Transportation, scheduling, permissions, preparation, follow-up, on and on the list goes. Running a truly excellent field trip is like art; it takes a lot of talent and a bit of luck too. The whole thing can be made somewhat easier by visiting places already geared up for school groups, such as some of the environmental centers included in this book.

So you want to build a solar collector with your class, plant a garden, collect soil samples and study them, or set up a ropes course. How do you do it, and where do you get the materials, without any budget to speak of? The first and last word on this issue is scrounge. It is amazing what can be done with waste materials: old tires, cardboard cartons, jars, and tins. Start out close to home (or the classroom as the case may be). What does the school cafeteria toss out each day? What about the maintenance department, the wood or metal shop? Then go further afield. If you keep animals you might visit local supermarkets and restaurants and leave a container, asking them to save scraps for you. Furniture stores, appliance outlets, and motorcycle dealers will all often have



wooden shipping crates to get rid of. If you are doing a special project (building a windmill, planting a garden, etc.) that has high visibility, consider asking for material sponsorship for your work. Offer to write the name of your sponsor all over the place. If the little league can cover their outfield fence with advertisements, you can fence your garden with them too.

The scrounging process is an environmental education in itself, and students who are expected to round up the materials needs for a project will have a deep and lasting sense of what is actually needed to do something. The getting there can be as important, educationally, as the end itself. So hustling and scrounging need not be seen as odious tasks done only because there is not enough money to avoid them. In fact, they ought to be embraced as part and parcel of the whole learning process. Recycling and fuller use of our limited natural resources is the key lesson in any sort of environmental education. A selection of books including plans for innovative projects with scrounged materials, as well as some places to look for bargains, are listed in the CURRICULUM RESOURCES section.

And now the bottom line, some comments on funding, or "Where is the money?"

The world of funding, especially large scale or federal funding, is incredibly complex and tortuous. There are literally hundreds of slightly differing categories, entitlements, and discretionary funds. Probably the most effective way to sift through all these to find the one best suited (or most likely) to fund your own efforts is to sit down with someone from your regional office of the Massachusetts Department of Education (see inside back cover for addresses). If you have an idea and you feel that you absolutely must have outside funding for it, the people at your regional office can help you to figure out what you are eligible for and how to apply for it. But a few cautionary notes are in order.

There is not much of it, especially in "environmental" categories. Try looking to other areas, filling dual needs with your work: occupational education, equal opportunity, special education, or bilingual education. Because almost any area can have an environmental approach applied to it you may be able to qualify for funding in a category other than "environmental education", the funds for which are extremely tight. Perhaps the best source of funding is not even within education? How about offices like the Department of Energy, the Department of Transportation, or the Environmental Protection Agency? If your work overlaps into their areas you may be able to collect support. Coming closer to home, it is worth looking around to see what needs to be done in your community,

then offering to do it in exchange for full or partial support of your school program: working on town conservation land, monitoring pollution locally, doing survey or mapping work in the town. The school board or town board of selectmen may be persuaded to grant extra monies if they see a demonstrable service to the community resulting.

What funding there is is hard to get, and when you get it you may wish you had not. That is hard to believe, but not one of the program directors I met had good things to say about the day to day routine of paperwork and bureaucracy involved in managing a large grant. This is not to scare you off from looking for it, just to give fair warning. In some subtle ways a lot of money can be more trouble than none. In extreme cases it can hurt the chances for your effort's long term success by misdirecting your energies into the soliciting and management of funds instead of the laying of a strong foundation of school and community support. This can be alienating, and create bitterness. Go carefully into the world of grant funding, and stay alert to the dangers as you seek out the benefits.

An alternative approach is the development of local sources of funds. Rather than looking for a big grant to establish a big program, start small and build slowly. Many industrial companies have charitable foundations associated with them; if one has a plant or offices located in your area try approaching them for support. How about small contributions from local merchants or businesses? Or donations in kind, of materials and services, from people whose skills from which you could really benefit. For example, if you are raring to build a greenhouse behind the school you could look for a grant, or you could get help from a plumber, a carpenter, an electrician, and supply stores.

Many programs raise money directly for their own purposes, committing themselves to the labor involved in paper drives, pledged races, plant and bake sales, or car washes. Be innovative. How about weatherstripping and caulking windows in the fall, with the proceeds going to the school's environmental education fund?

There is no easy way.

Raising money, no matter how it is done, takes time, energy, and belief. Money is a central ingredient in most everything done at schools these days, and money is harder and harder to come by. Doing things that cost less money relieves the burden somewhat. Raising what money you must have from within the community will guarantee that the work being done actually meets community needs, and thus may assure a longer life for the project. These are not the only answers, but they are possibilities. And they are not heard often enough.

Finally a few notes on all this. Do it yourself whenever possible. Do not expect someone else to have done the work for you, so that all you have to do is plug it in. Environmental education does not work that way, and should not. Besides, others do not have any more free time than you do, and they are not half as concerned with the quality of your results as you are. There is no such thing as a ready made environmental program and any attempt to transfer something intact is doomed. Use ideas and inspiration freely. Apply elbow grease liberally as needed.

Please use resources thoughtfully. This publication is well peppered with names and addresses of very busy people. Each one of them is willing and able to help get your work off the ground, but be considerate. Use them, do not abuse them, or they will never make the mistake of allowing themselves to be listed again.

And a last comment on the nature of nature, or of environmental studies. Be adventurous. Try things. Nothing good ever happened without someone taking a chance. Wade in and get muddy, go way out on a limb, stand up for what you believe even if you are not absolutely sure you can pull it off. Do not be afraid to do things that might be called strange. Remember that the point of environmental education is to demonstrate the interrelationships between all things, so examine what is around: desks, pencils and blackboard before gazing out the window, schoolyard before the woods, and the local forest before a distant mountain trip. Flush a toilet. That is a field trip that is easy to run, easy to control, and infinitely interesting.

As you expand the walls of your classroom by bringing things in or taking students out, keep a record of what you do, when, and with what resources. The record is a sort of map that will help you and others repeat successful events and avoid disasters. In many ways that is what environmental education does best: makes maps. So please go out adventuring and gathering. Take your students along, make your maps and discoveries together, and share them around. We will all benefit.

Good luck!



## BOOKS

From: Professor Allen Wakstein, Department  
of History, Boston College, Chestnut Hill,  
MA 02167

### 1. ACCLIMATIZATION

Steve Van Matre  
American Camping Association

This essay, in book form, lays out the framework for environmental experience building in a constructive, logical manner. The idea of "acclimatization" is that any environment can be used as the vehicle for expanded physical, emotional, and intellectual awareness. This is the conceptual base for the best of current outdoor education efforts.

From: Acclimatization Experiences Institute,  
Box 841, Lake Geneva, WI 53147

### 2. ACCLIMATIZING

Steve Van Matre  
American Camping Association

If Acclimatization got you interested in a holistic approach to outdoor environmental experiences, then this workbook/manual will be just the thing you're looking for. Provides a sequence of field exercises for implementing the philosophy of acclimatization. Clear, accurate, and easy to follow.

From: Acclimatization Experiences Institute,  
Box 841, Lake Geneva, WI 53147

### 3. BASIC ECOLOGY

Ralph and Mildred Buchsbaum  
Boxwood Press, 1957

Teachers of ecology will need no introduction to this little book, first printed in 1957 and regularly updated. Probably the best introduction to ecology and the concept of environmental balance ever written. Readable and clear for the junior high school and up.

From: Most textbook suppliers, or  
The Boxwood Press, Pittsburgh, PA

### 4. BOSTON'S HISTORY: A RESOURCE BOOK

Staff of "The Boston Experience"

A practical, hands-on guide to using the city as a learning laboratory. Includes bibliographies and resource locators for both students and teachers, an audio-visual resource list, and a working guide to the city's institutions and places of interest.

### 5. CITY

David McCaulay  
MacMillan and Company

In this book McCaulay does for the evolution of a city what he did in Underground (see #23). First rate drawings and clear text describe the myriad elements on an urban scene. If a student ever asks what a city actually is, point them at this book.

From: most bookstores

### 6. ECOLOGY, ENVIRONMENT AND EDUCATION

R. Thomas Tanner  
Professional Educators Publications, Inc.,  
1974

Focuses on major issues in environmental education and details what might be needed to establish a quality program. Looks at urban environmental work, reviews selected sample programs and instructional materials, and examines teacher training at professional centers.

From: Professional Educators Publications,  
Inc., Lincoln, NB 68501

### 7. ENVIRONMENTAL EDUCATION

William Stapp and James Swann, editors  
John Wiley & Sons, 1974

Theory and practice of environmental education by a variety of writers and practitioners, covering the history and development of the movement, and including suggestions on curriculum planning. A good handbook for planners and administrators; interesting reading for anyone.

From: most textbook distributors

### 8. ENVIRONMENTAL EDUCATION ACTIVITIES MANUAL

William Stapp, editor

A six volume manual listing three hundred possible environmental education activities.

From: Dorothy Cox, 30808 LaMar Street,  
Farmington Hill, MI 48024



9. A GUIDE TO NEW ENGLAND LANDSCAPE

Neil Jorgensen  
Barre Publishers, 1971

A must for anyone taking kids outdoors. It covers bedrock geology, the effects of glaciers, and vegetation. Makes a trip outside an important learning experience.

From: most bookstores

10. HOW TO START A SCHOOL GARDENING PROGRAM

Peter J. Wotowiec  
Gardens For All

A clear step-by-step handbook especially for teachers and administrators interested in starting an educational gardening project at their school. The book includes a sample curriculum and lessons plans.

From: Gardens For All, Shelburne, VT 05482

11. THE IMAGE OF THE CITY

Kevin Lynch  
M.I.T. Press

The author wonders what makes a city a city, and looks into the question with Boston as one of his central examples. What he finds is that the exchange between people and geography produces a unique image, an image always evolving and changing. And he wonders too, how can we control that change? Great ideas, thoroughly ecological in the best sense of the word.

From: most bookstores, or The M.I.T. Press, Cambridge, MA 02142

12. IN AND OUT OF BOSTON WITH CHILDREN

Bernice Chesler  
Barre Publishing, 1975

A wealth of information on activities and places to go with children in the greater Boston area. Sections on open space and parks, recreation, and organizations to contact for more information. Handy and useful for teachers as well as parents, especially for trip planning.

From: most bookstores

13. THE NEW GAMES BOOK

Andrew Fluegelman, editor  
Doubleday & Company, 1976

Having fun, taken seriously. One aspect of environmental education, sometimes overlooked (or underplayed?), is athletics or playing environmental games. Games can be great teachers of serious concepts, like cooperation and confidence. This collection of games emphasizes cooperation and collective pleasure, not competition and winning. Excellent resource for teaching any age group.

From: most bookstores

14. OUTDOOR EDUCATION EQUIPMENT

Russell Bachert and E. L. Snooks  
The Interstate Printers and Publishers, Inc., 1974

Plans for making and using many items useful in exploring the environment, gathering data, and solving problems. Topics covered include animal life, mathematics, water, weather, and soils.

From: The Interstate Printers and Publishers, Inc., Danville, IL 61832

15. OUTDOOR SCIENCE FOR ELEMENTARY GRADES

John H. Rosengren  
Parker Publishing Company, 1972

A book packed with ideas, units, and activities suitable for expanding an elementary school science program beyond the walls of the classroom, with a listing of good resource materials.

From: Parker Publishing Co. Inc., West Nyack, NY 01994

16. A RESOURCE GUIDE TO OUTDOOR EDUCATION IN NEW ENGLAND

Elaine Barber and Will Phillips, editors  
Massachusetts Environmental Education Society, 1978

A clear and comprehensive reference to resources, facilities, and organizations useful to anyone working in environmental education. Very well indexed and edited.

From: Massachusetts Environmental Society, 15 State Street, Boston, MA 02109  
\$5.50, post paid

17. SMALL WORLDS: A FIELD TRIP GUIDE

Helen Ross Russell  
Little, Brown & Co., 1972

A look at microcosms for grades 3-6, examines the habitats of insects, trees, and algae, and explains where to find them. Designed to make children more aware of these environments, and thus more aware of their own.

From: most bookstores and textbook distributors

18. A TEACHER'S GUIDE TO MARINE EDUCATION

Thomas J. O'Regan and Frank Sullivan,  
editors  
Marine Sciences Institute, 1978

A thorough and wide ranging guide to marine education resources, primarily on the north shore. Covers everything from museums to sea going laboratories, field trip opportunities to shellfish identification. A real asset to anyone planning a coastal trip with a school group.

From: Marine Sciences Institute, Salem State College, Salem, MA 01970  
\$3.00

19. TEACHING THROUGH ADVENTURE:  
A PRACTICAL APPROACH

Project Adventure, 1976

A lively and inspiring handbook containing curriculum samples, illustrations, worksheets, 'how-to' information, and advice on planning and implementation. Combines personal experience with solid instruction on involving a direct experiential component in an educational program.

From: Project Adventure, Box 157,  
Hamilton, MA 01936  
\$5.50, post paid

20. TEN MINUTE FIELD TRIPS

Helen Ross Russell  
Little, Brown and Co., 1973

For the teacher who can't figure out how to get kids out of the classroom, into coats and mittens, out to the schoolyard, back again in a single class period, and get anything done while you're at it. Plant and animal ecology, and a good list of possible activities in a paved place are included.

From: most bookstores and textbook distributors

21. WHAT TIME IS THIS PLACE?

Kevin Lynch  
M.I.T. Press

The author tries to figure out what we've overlooked in our analysis of environments, and concludes that we haven't learned well enough to observe and take into account the passage of time. He does so. Simple, and in its way radical, the book is an ideal teacher resource for those interested in going a bit deeper into environmental studies.

From: most bookstores, or The M.I.T. Press,  
Cambridge, MA 02142

22. TREES AND SHRUBS OF NORTHERN NEW ENGLAND

Albion R. Hodgdon and Frederic L. Steele  
Society for the Protection of New Hampshire Forests, 1971

A field guide, simply laid out, with good line drawings. Could be easily understood by high school age. Pocket sized, accurate and local, plus the fact that its sale supports a fine group.

From: SPNHF, 5 South State Street,  
Concord, NH 03301  
\$2.00

23. UNDERGROUND

David McCaulay  
MacMillan & Company

Did you ever wonder what went on beneath the streets of a city? This designer and illustrator did, and in the course of finding out he went down into manholes, subways, tunnels, etc. He wrote and drew a book, each craft expertly done, that takes apart a typical city intersection from the pavement down. Fine for any age group, and nobody who ever reads it will see a street in the same way again.

From: most bookstores

24. UNDERSTANDING SCHOOLYARD ECOLOGY

Harry Betros  
Exposition Press, 1972

A guide to schoolyard environmental



exploration for teachers. Covers topics such as the needs of plants and animals, green plants, flowers and trees, and the seasons.

From: Exposition Press, Inc., 50 Jericho Turnpike, Jericho, NY 11753

25. THE UNIVERSAL TRAVELER

Jim Bagnall and Don Koberg  
William Kaufmann, Inc., 1976

This cleverly designed and delightful book calls itself a "soft-systems guide to: creativity, problem solving and the process of reaching goals," and it's not at all as scary as it sounds. Presents clear, human ways of getting over conceptual roadblocks. A real asset for working with stubborn problems, your own or other people's.

From: William Kaufmann, Inc., 1 First Street, Los Altos, CA 94022  
\$5.45

26. WATERSHEDS

Peter Warshall, editor  
Co-Evolution Quarterly/Penguin, 1978

A remarkable book, looking hard at something too few of us ever look at at all, much less in this depth. A collection of articles and essays examine the concept of a watershed, and its essential role in human existence. The end result is a conclusive and iron-clad documentation of the interdependence of human and natural systems.

From: most bookstores, or Co-Evolution Quarterly, Box 428, Sausalito, CA 94965  
\$6.00

27. WHAT MAKES EDUCATION ENVIRONMENTAL?

Don Albrecht and Noel McInnis, editors  
Data Courier, Inc. and Environmental Educators, Inc., 1975

A diverse collection of articles and essays on just what the title says it is, mixing philosophy with practicality. How and why of environmental education. Well indexed, chock full of references to other sources.

From: Data Courier, Inc., 620 5th Street, Louisville, KY 40202

28. WHO'S WHO IN BOSTON: PEOPLE AND PROGRAMS IN URBAN ENVIRONMENTAL EDUCATION

Margaret Shean Ris, Sharlene Voogd, Jay Vogt, editors  
City Sources, 1978

Responses to a questionnaire circulated by members of City Sources, Boston's urban environmental education coalition. An informal but informative guide to who's doing what around Boston.

From: City Sources, c/o Paul Fishman, Special Programs, Harvard Graduate School of Design, Cambridge, MA 02138  
\$5.00

29. YOU ARE AN ENVIRONMENT: TEACHING/LEARNING ENVIRONMENTAL ATTITUDES

Noel McInnis  
Center for Curriculum Design

Theory and practice, but mostly theory on how to teach environmentally, by one of the editors of What Makes Education Environmental?. McInnis begins very close to home, within himself. Good reading for anyone well into environmental philosophy.

From: Center for Curriculum Design, Evanston, IL



## PERIODICALS

Periodicals are a remarkable source of current information, and ought to be in every classroom. News magazines, newspapers like The Christian Science Monitor which go into frequent depth on environmental issues, and most importantly local papers can give students a lot to work with on special projects. Without getting into an exhaustive list, we've selected a few unusual additions to a list you may already know. Standards shouldn't be neglected (Smithsonian, Natural History, Audubon, etc.) and special interest magazines like Organic Gardening are useful. Here are a few others, less well known.

### 30. THE CO-EVOLUTION QUARTERLY

A thoroughly eclectic journal of things, ideas, attitudes, technology, history, and the future. This is an outgrowth of the Whole Earth Catalog, run by many of the same people. No advertising, so no pressure. Lots of reader feedback. The magazine defines environmental in the largest sense, and takes an environmental viewpoint. A goldmine of information, each issue has a catalog section on appropriate technology and communities, among other things. Great for teachers, good too for most bright high schoolers.

From: Co-Evolution Quarterly, Box 428-  
Sausalito, CA 94965

### 31. CURRENT ENERGY AND ECOLOGY

Subtitled the "Continuing Guide to Environmental Education", this is a classroom publication intended for high school students, but it could be useful for bright middle schoolers as well. Covers current ecological issues in a news magazine format, and does background stories on aspects of environmental affairs.

From: Curriculum Innovations, Inc.,  
501 Lake Forest Avenue, Highwood, IL 60040  
\$3.75 per student, per school year,  
15 subscription minimum

### 32. ENVIRONMENTAL EDUCATION REPORT

A concise monthly sampling of all that's happening in environmental education with departments covering school programs, books and films, curriculum guides, multimedia packages, and other resources. Includes feature articles.

From: Environmental Educators, Inc.

### 33. NEW ROOTS

This is a small journal of appropriate technology (solar, wind, etc.) published in western Massachusetts, and it keeps in touch with what goes on in ecology, energy, and environmental work in Massachusetts and New England. An access section lists current projects and people as well as good resources.

From: New Roots , Box 459, Amherst, MA  
01002

### 34. NOT MAN APART

The bi-weekly newspaper of the environmental organization Friends of the Earth is probably the best thing of its kind. It comes out frequently enough to keep up with current events, and goes into considerable depth. A fine addition to any classroom, the magazine has a clear conservation bias but is surprisingly even handed.

From: Friends of the Earth, 529 Commercial  
Street, San Francisco, CA 94111

## ORGANIZATIONS AND INSTITUTIONS

### STATEWIDE

#### 35. APPALACHIAN MOUNTAIN CLUB

5 Joy Street  
Boston, MA 02108

The A.M.C. primarily focuses on climbing and camping in mountain areas of New England and the eastern United States. The club offers help with the planning of an outdoor trip, consults on outdoor safety for groups, and works to develop environmental awareness. A.M.C. also operates huts and shelters in several New England mountain areas, and handles reservations for these places.

#### 36. CULTURAL EDUCATION COLLABORATIVE

164 Newbury Street 49 Chestnut Street  
Boston, MA 02116 Springfield, MA 01003  
(617) 267-6254 (413) 732-1418

The collaborative is a small non-profit group whose purpose is to facilitate working relationships between cultural institutions and schools in Massachusetts. Toward this end they provide consultation and advice, small grants on occasion, and assistance in program development. The latest addition is Culture Connection, a toll free phone number hooking into a computer listing of cultural organizations, historical societies, libraries, and outdoor education centers for the use of schools. Member schools in the network pay a small charge for the service.

#### 37. INSTITUTE FOR ENVIRONMENTAL AWARENESS

113 Beacon Street  
Greenfield, MA 01301

The institute is a non-profit educational organization dedicated to programs in leadership training and research in environmental education and outdoor recreation. The institute offers a variety of custom-designed residential programs for teachers and others.

#### 38. MASSACHUSETTS AUDUBON SOCIETY

Hatheway Environmental Education Institute  
South Great Road  
Lincoln, MA 01773

The M.A.S. is the most visible private non-profit environmental organization in Massachusetts, and the Hatheway Institute is its formal educational wing. The institute has an extensive library, resource collection, and a staff of trained

educators, and provides individual consultation by phone or letter. Zero In On Environmental Education is their list of publications available. The institute offers consulting services to develop small units or entire curricula for school systems in the state, at fees set for each project. In addition, the M.A.S. operates sanctuaries, nature centers, and environmental education centers across Massachusetts (some of which will be listed in this publication, see REGIONAL RESOURCES following). A complete list of these facilities is available from M.A.S.

#### 39. MASSACHUSETTS DEPARTMENT OF AGRICULTURE

Division of Land Use  
100 Cambridge Street  
Boston, MA 02202

The Division of Land Use seeks to assist schools in the development of programs which promote better understanding of land use practices, and is particularly interested in school gardening programs. A regular conference of school garden coordinators is sponsored, and the division has curriculum aids and resource information available.

#### 40. MASSACHUSETTS DEPARTMENT OF EDUCATION

The department can offer a wide variety of services, the bulk of which can best be described as advice. The most efficient way to determine how your needs can be served by the department is to bring your question to someone in your regional office (see inside back cover for addresses). If your question or inquiry needs to be answered by someone in one of the Boston offices, the regional office will help send you to the right person, with a minimum of confusion.

#### 41. MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

100 Cambridge Street  
Boston, MA 02202

The department is a state resource and land managing agency with more than 120 parks and reservations statewide. A list of these, and their locations, is available.

#### 42. MASSACHUSETTS ENVIRONMENTAL EDUCATION SOCIETY

15 State Street  
Boston, MA 02109

M.E.E.S. is a volunteer society of individuals and organizations concerned with



furthering environmental education in Massachusetts. The purpose of the society is to encourage communication among professionals, recruit educators to the cause, expand environmental education activities, and inform the public of ongoing work. The society sponsors seasonal conferences, and occasional workshops. Members receive a newsletter.

43. MASSACHUSETTS FOREST AND PARK ASSOCIATION  
1 Court Street  
Boston, MA 02115

The association is a private lobbying group dealing with conservation legislation. It has produced many books and papers on environmental issues, which are available, and offers internships to students who seek to work in environmental action programs.

44. MASSACHUSETTS HORTICULTURAL SOCIETY  
300 Massachusetts Avenue  
Boston, MA 02115

The society is a membership organization devoted to the promotion of new and existing horticultural activities, including community gardening and environmental education. The society has consulted with teachers on the development of plant related curriculum units, and is operating a travelling workshop unit, available for a fee.

45. MASSACHUSETTS MARINE EDUCATORS  
c/o Joseph MacQuade  
12 Gerry Street  
Marblehead, MA 01945

M.M.E. is a teachers' organization dedicated to sharing resources, experiences, and enthusiasm for marine education. The group attempts to develop new water-related curricula, and to infuse marine and fresh water studies into the schools at all levels. The group sponsors regular workshops, meetings, and whale watching trips. A monthly newsletter and an occasional journal are published by M.M.E.

46. NATIONAL PARK SERVICE  
North Atlantic Region  
15 State Street  
Boston, MA 02109 (617) 223-3766

The park service administers the N.E.E.D. environmental education materials (see #99) and helps to infuse them into schools. Also, the various national

parks in Massachusetts all have environmental education staff who will endeavor to establish programs with schools from their area. The park service does teacher training, and its services are free upon request.

47. NEW ENGLAND WILDFLOWER SOCIETY  
Garden In the Woods  
Hemenway Road  
Framingham, MA 01701

The society offers teacher training in several botanical and environmental areas, maintains a wildflower sanctuary at Garden In the Woods, offers consulting work to schools, and is in the process of developing curriculum materials for dissemination.

48. SIERRA CLUB: NEW ENGLAND CHAPTER  
3 Joy Street  
Boston, MA 02108

The regional office of the largest environmental organization in the country offers assistance to groups and individuals concerned about lobbying for conservation issues; publishes a newsletter; and sponsors an extensive series of events, workshops, lectures, and field trips.

49. TRUSTEES OF RESERVATIONS  
224 Adams Street  
Milton, MA 02186

A privately administered charitable corporation founded for the conservation, preservation, management, and protection of Massachusetts reservation lands. The trustees protect and interpret cultural and environmental values, and administer fifty-three open space and historic areas across the state. Descriptions and locations of these areas are available.

50. UNIVERSITY OF MASSACHUSETTS COOPERATIVE EXTENSION SERVICE

Originally set up to offer agricultural college information to farmers, the extension service has grown and expanded over the years. It now has urban gardening programs, among other things, and offers information on a variety of land and agriculturally oriented topics, such as appropriate technology. Each county in the state has an office of the extension service. Consult your local telephone book.



51. YMCA/YWCA

The "Y's" of every small city or big town will often assist school groups in developing out of school activities, and have good experience in working with groups and expeditions. A good place to contact when trying to establish local support for an environmental education program in schools. Check your local telephone directory.

REGIONAL

Most of the following resources are local or regional in approach; their services or facilities are offered to a primary audience of citizens and schools within their general geographic area. Most of them, however, welcome visitors from outside these boundaries on occasion. If you are considering an expedition to a part of the state where one or more of these resources is located, don't hesitate to get in touch.

GREATER BOSTON

52. BLUE HILLS TRAILSIDE MUSEUM

Massachusetts Audubon Society  
1905 Canton Avenue  
Milton, MA 02186 (617) 333-0690

The museum encourages the individual to expand an awareness and appreciation of the natural environment through exhibits, lectures, courses, nature walks, and publications. Specially designed activities for school groups are available, and the museum welcomes the involvement of schools and teachers in its efforts.

53. BOSTON ZOOLOGICAL SOCIETY

Franklin Park  
Boston, MA 02119 (617) 442-2002

The education department of the zoo has developed a wide range of innovative and involving programs for schools, working within the schools in some cases and bringing students to the zoo in others. The emphasis is on relating the inter-relationships of animal habitats and societies to those of the students.

54. CHICKATAWBUT HILL

Box 408  
Milton, MA 02186 (617) 696-0290

A Massachusetts Audubon Society sanctuary, the Hill has a strong commitment to environmental education especially work with school classes. The Hill offers workshops with the Outdoor Biology Implementation Strategies (O.B.I.S.) materials, as well as teacher training in outdoor skills and natural

history. Special programs for schools can be arranged, and the education staff will assist in the development and implementation of programs.

55. THE CHILDREN'S MUSEUM

Museum Wharf  
300 Congress Street  
Boston, MA 02210 (617) 426-8855

In its new home in an old warehouse, the museum continues to do superlative work in developing programs for and with schools which expand student awareness of culture and environment. Teacher training is available. Special programs can be developed around the museum's staff or facilities to tie into school curricula. Extensive lists of curriculum aids and materials are available, and the Museum Shop and Recycle Center have a lot of good things for teachers

56. HABITAT INSTITUTE FOR THE ENVIRONMENT

10 Juniper Road  
Box 136  
Belmont, MA 02178 (617) 489-3850

Habitat is an environmental center with a strong environmental education program located quite near Boston, on a large wildlife refuge. Regularly scheduled courses in a range of fields are given each season, and specially designed visits and arrangements with school groups can be done through the institute's program director. An excellent resource library for environmental studies, greenhouses, and nature trails.

57. HALE RESERVATION

80 Carby Street  
Westwood, MA 02090 (617) 326-1770

A large outdoor and environmental education facility located near Boston, Hale provides environmental education for schools through scheduled classes and specially developed consultations. Environmental awareness is the basis for the reservation's work, but adventure and challenge components are used. Several publications for teachers, including a handbook of environmental activities, are available.

58. HUMAN ENVIRONMENT INSTITUTE

Boston University  
School of Education  
730 Commonwealth Avenue  
Boston, MA 02215 (617) 232-0121

H.E.I. is a program of Boston University concerned with the training of education majors in techniques of outdoor and

environmental education, as well as with providing programs for schools and other groups. H.E.I. co-sponsors the fine H.U.E.S. Program (see abstract #14), and runs a residential environmental facility in New Hampshire. Staff and student teaching interns from H.E.I. will work with schools to develop appropriate programs in individual cases.

59. NEW ENGLAND AQUARIUM  
Central Wharf  
Boston, MA 02110 (617) 742-8830

The education staff of the aquarium will design special visits for school groups whose curriculum has centered on particular aspects of marine studies. Guided tours are always available, and long term programs and teacher training may be developed with the aquarium education staff.

60. THOMPSON EDUCATION CENTER  
Thompson's Island  
P.O. Box 127  
Boston, MA 02127 (617) 328-3900

The offerings and operation of the Thompson Center, on Thompson's Island in Boston Harbor, are fully described in a profile included on page 20 of this publication.

#### NORTHEAST

61. DRUMLIN FARM EDUCATION CENTER  
Great South Road  
Lincoln, MA 01773 (617) 259-9807

Drumlin is a Massachusetts Audubon facility, an interpretive farm and natural history center offering standard scheduled and specially designed education programs. Farming and wild animals, agricultural and natural habitats are exhibited and explained. Several publications are available.

62. GREAT MEADOWS NATIONAL WILDLIFE REFUGE  
191 Sudbury Road  
Concord, MA 01742 (617) 369-5518

A resting spot for migratory birds, the refuge is an amazing place to visit during the migration periods in spring and fall. At other times of the year organized outdoor recreation and environmental education offerings are made available to schools. The Concord schools make extensive use of this facility. Occasional teacher and leader training workshops are held, and special programs may infre-

quently be arranged.

63. MARINE SCIENCES INSTITUTE  
Salem State College  
Salem, MA 01970 (617) 745-0556 x376

The institute is a teacher training program for the development of skills and materials in marine sciences and related disciplines, attempting to encourage the infusion of marine studies into school curricula. This is offered primarily to north shore teachers, but available to all. A Teacher's Guide to Marine Education has been produced by the institute and is available.

64. MINUTEMAN NATIONAL HISTORICAL PARK  
P.O. Box 160  
Concord, MA 01742 (617) 484-6192

The park has an active educational component working with individuals or groups on the historical and cultural environment. Curriculum aids have been developed by the education staff, and special programs with area schools are always possible. The park's concentration is on the relevance of history, and attempts to bring alive the colonial period.

#### SOUTHEAST

65. CAPE COD MUSEUM OF NATURAL HISTORY  
Route 6A  
Brewster, MA 02631 (617) 896-3867

The offerings and operation of the Cape Cod Museum of Natural History's educational outreach program are described in this book with a profile on page 30 .

66. CAPE COD OUTDOOR EDUCATION CENTER  
73 White Rock Road  
Yarmouth, MA 02675 (617) 362-4809

A residential outdoor and environmental education center offering staff and facilities for visits to the Cape. The center emphasizes environmental awareness through a variety of activities, geared for grades 5-9, with a flexible program designed to take advantage of differing student interests. The facility is located in a marsh and woods area, and maintains marked trails.

67. CAPE COD SEA CAMPS/CENTERS FOR LEARNING AND LIVING  
Brewster, MA 02631 (617) 896-3451



The CCSC have evolved from simply a summer camp into a year round location for outside or environmental education. The special emphasis here is on natural relationships in the marine ecosystem, using their location near a fresh water lake, and adjacent to the shore, as a means of exploring the complex interdependencies of marine and land-based ecologies. Trained staff are available, and consulting staff from several Cape institutions may be called in.

68. CHILDREN'S MUSEUM/MUSEUM OUTDOORS, INC.  
P.O. Box 98  
1212 Russells Mills Road  
Dartmouth, MA 02714 (617) 993-3361

Two facilities are concerned with promoting a better understanding of natural systems: an indoor museum with exhibits, historical and nature collections, and live animals; and an outdoor nature center with a pond and marked trails. Scheduled lessons are offered for visiting school groups, and teacher training for teachers wanting to use the facilities is available.

69. NEW ALCHEMY INSTITUTE  
Box 47  
Woods Hole, MA 02543 (617) 563-2655

New Alchemy is a research and development center working in the areas of self-sufficient small scale farming and energy production. They operate working experimental aquaculture and agriculture systems, and design and test solar and wind energy systems. Recently a semi-formal program of school-oriented instruction and education has been created. The institute is open for tours by arrangement, and in-school presentations may be possible. A fine field trip destination, the institute is one of the foremost centers for research into appropriate technology in the country.

70. SOUTH SHORE NATURAL SCIENCE CENTER  
Jacobs Lane  
Norwell, MA 02061 (617) 695-2559

An informal nature and science center with trails, exhibits, a sensory trail for blind people, and a research library. School groups may arrange guided visits or special programs. Center staff will visit schools, and teacher training is available.

71. WEB OF LIFE OUTDOOR EDUCATION CENTER  
State Road  
RFD #1  
Plymouth, MA 02360 (617) 224-8586

The two-hundred acre outdoor center with residential facilities offers programs for teachers and schools in marine sciences, wetlands, geology, forest communities, edible plants, and other areas. An internship program exists, and programs will be tailored to school needs.

#### CENTRAL MASSACHUSETTS

72. WARREN CENTER  
Northeastern University  
529 Chestnut Street  
Ashland, MA 01721 (617) 881-1142

This outdoor education and conference center for the university, offers consultation and develops programs in outdoor and environmental education. Student teaching interns from Northeastern are active in several efforts in Massachusetts, and if enough advance notice is given they will assist schools in the creation of an activity plan around the Warren Center.

73. WILDWOOD NATURE CENTER  
Barre, MA 01005 (617) 355-4064

A Massachusetts Audubon center, Wildwood features special plantings which demonstrate native natural species. The center is available for school group visits, and special instruction can be scheduled. In addition, there is a residential facility where teacher training workshops may occasionally be held, and which is available for school use, when scheduled well in advance.

74. WORCESTER SCIENCE CENTER  
222 Harrington Way  
Worcester, MA 01604 (413) 791-9211

The center is a facility with an educational center, zoo, and omnisphere offering programs in the physical and natural sciences. School groups are encouraged to use the center, and cooperative efforts with local public schools have been developed.

#### SPRINGFIELD

75. ARCADIA NATURE CENTER AND WILDLIFE SANCTUARY  
127 Combs Road  
Easthampton, MA 01027 (413) 584-3009

Arcadia is a Massachusetts Audubon sanctuary on several hundred acres alongside the Connecticut River. Arcadia works with school groups on request, to create



programs in natural and environmental studies, history, and science. A reference collection centers on rivers, floodplains, and water studies.

76. HITCHCOCK CENTER FOR THE ENVIRONMENT  
525 South Pleasant Street  
Amherst, MA 01002 (413) 256-6006

A nature and environmental center with an emphasis on education, Hitchcock works closely with local schools to develop mutually valuable programs. Teacher training workshops and internship opportunities for college students from the several colleges nearby are a big part of the center's offerings, as are scheduled courses, field trips, and workshops. The center has strong experience in collaborating with schools and teachers.

77. LAUGHING BROOK EDUCATION CENTER  
AND SANCTUARY  
789 Main Street  
Hampden, MA 01036 (413) 566-3571

The center is an environmental education offering of the Massachusetts Audubon Society, concentrating on natural history and working actively with schools in its area. A staff of trained educators maintains a reference collection and works with school groups and teachers to design and implement programs using the center's facilities. The center trains teachers and volunteers regularly, and seeks out community and school involvement in its efforts.

78. NATURE'S CLASSROOM  
Maple Rock Farm, RFD #1  
Southbridge, MA 01550 (617) 764-8321

Nature's Classroom is a non-profit educational program which offers school groups the opportunity to study ecology in an outdoor setting, relating the standard school curriculum to practical application in the outdoors. Preparation and follow up services are available, and specially designed programs may be arranged.

79. SPRINGFIELD COLLEGE  
Biology Department  
Springfield, MA 01109 (413) 787-2389

While primarily concerned with training students of the college, this institution offers occasional special programs for schools or community groups, and when

a school groups' needs coincide with the teaching emphasis within the department a working arrangement may be worked out. Student interns from the college may work with local schools to develop environmental science programs.

#### PITTSFIELD

80. BECKETT/CHIMNEY CORNERS OUTDOOR CENTER  
Y.M.C.A. Road  
Beckett, MA 01223 (413) 623-8991

A large residential facility located on eight-hundred acres in the Berkshires, the Outdoor Center offers residential environmental education programs for schools, as well as teacher training workshops. These are regularly scheduled, but may be specially arranged on request.

81. BERKSHIRE GARDEN CENTER  
Stockbridge, MA 01262 (413) 298-4897

This indoor and outdoor facility maintains gardens of all sorts including grains, vegetables, herbs, ornamentals, roses, and lilies. The center has a sugar house with maple sugaring production each spring, a solar greenhouse, and a special teaching greenhouse for young people. The center has worked closely with the local schools, especially in Pittsfield, to provide a variety of education offerings on a formal, scheduled basis.

82. NORTHFIELD MOUNTAIN RECREATION AND  
ENVIRONMENTAL CENTER  
RR 1, Box 377  
Northfield, MA 01360 (413) 659-3713

The Northeast Utilities hydroelectric generating station is located on Northfield Mountain, and the reclaimed mountain has been developed as a nature and environmental center, with cross country ski trails, nature trails, and scheduled activities. School groups are encouraged to visit the facility and the environmental center. Special programs can be arranged with the center's director.

83. PLEASANT VALLEY NATURE CENTER  
4 Sullivan Lane  
Lenox, MA 01240

A Massachusetts Audubon center, Pleasant Valley is particularly concerned with interacting within schools, and has worked closely with the Pittsfield school department to facilitate a scheduled program of visits, with center staff working in the classrooms, and classes visiting the center.

## CURRICULUM RESOURCES

Where to get things, ideas, and materials, and how? And what can be done with them once you've found them? What goes into a garden or a solar panel? Where can you get slides of a distant place, or detailed maps of your own town? The first and most important point is to begin close to home. Try your local library, conservation commission, town clerk, or hall of records for histories, old and new maps, and census information. Then go further afield, to colleges and universities, or state and federal agencies. Following are some other ideas.

### 84. CITY GAMES

The Children's Museum and  
Cambridge Seven Associates  
Addison Wesley

An innovative and far-reaching curriculum package designed by The Children's Museum and a Boston area architectural firm. Activities and learning sequences for younger children, looking at many different facets of what makes a city tick.

From: The Children's Museum, Museum Wharf,  
300 Congress Street, Boston, MA 02210  
(617) 426-8855

### 85. COMMUNITY HISTORY EXPLORER'S KIT

Cynthia Kryston, editor

This work kit designed by the education specialists of Minuteman National Historical Park in Concord contains sample wills and deeds, worksheets, maps, and pictures. It's geared for the Concord area but would be valuable as an example for anyone wanting to get deeper into community history. Subtitled "A Resource Packet for Community Studies".

From: National Park Service, Minuteman  
National Historical Park, P.O. Box 160,  
Concord, MA 01742 (617) 369-6993

### 86. DIRECTORY OF ENVIRONMENTAL GROUPS IN NEW ENGLAND

A listing of all non-profit organizations devoted to protection of the environment that are currently active in New England.

From: Environmental Protection Agency,  
2203 J.F.K. Federal Building, Boston, MA  
02203 (617) 223-7223

## 87. E.C.O.S. CURRICULUM GUIDES

Lorraine B. Ide and Clifford A. Phaneuf

This ring-bound set of activities and curriculum is intended for students in grades 4, 5, and 6 participating in programs at the Environmental Center of Springfield (see profile, p. 32) but it contains many generally applicable ideas.

From: E.C.O.S., Springfield Public Schools,  
195 State Street, Springfield, MA 01103

## 88. ENERGY EDUCATION MATERIALS

National Solar Heating and Cooling Information Center, 1978

One of several bibliographies and source lists available from this lobbying organization. The sheet lists curricula, small scale solar kits suitable for classroom demonstration, and references. Others in the series include "Films and Slides", "Solar Kit Manufacturers", "Newsletters", "Practical and Do It Yourself Projects".

From: National Solar Heating and Cooling  
Information Center, P.O. Box 1607,  
Rockville, MD 20850

## 89. ENERGY INFORMATION SERVICES

Boston Edison, Inc.

For schools in the greater Boston area, this electric utility company offers a number of curriculum aids and even class visits from company representatives. Their catalogue of services would be useful to many people regardless of location, as it lists resources available from many different sources.

From: Public Information Department, Boston  
Edison, 800 Boylston Street, Boston, MA  
02199 (617) 424-2000

## 90. ENVIRONMENTAL EDUCATION STRATEGIES

University of the State of New York, 1972

A short handbook produced by the New York State Department of Education and intended for teachers who want to begin trying out community centered environmental education efforts. The booklet covers activities, concepts, use of local materials like newspapers and community agencies, and some hints on setting up extra-curricular activities and student projects. Especially the



section on involving families and neighbors is good. Many users have appreciated the advice in this pamphlet.

From: New York State Education Department,  
31 Washington Avenue, Albany, NY 12224

91. THE ENVIRONMENTALIST

A booklet detailing sources for tracking down free or inexpensive materials for use in environmental education.

From: The Environmentalist, 390 Princeton Avenue, Santa Barbara, CA 93111

92. ERIC PUBLICATIONS

ERIC (Educational Resources Information Center) is a computerized file of educational resources, with a specific environmental education subcategory. The ERIC center has a bibliography of currently available publications, and distributes periodic updates.

From: ERIC, Science, Mathematics, and Environmental Education, Ohio State University College of Education, 1200 Chambers Road, Columbus, OH 43212

93. ESSENCE

Addison Wesley

Presents environmental curriculum materials, very valid and human, which encourage high risk human teaching. The idea is that the best learning takes place where risks are taken and trust is expressed. The kit is called an "Earth Science Teachers' Preparation Project".

From: Addison Wesley (Order #6756),  
Reading, MA 01867

94. EVALUATIONS OF ENVIRONMENTAL EDUCATION CURRICULUM MATERIALS

Detailed reviews of thirty environmental education curricula at all grade levels, covers most well known and popular options. Nice catalogue, if your school is considering an already prepared curriculum plan.

From: Western Pennsylvania Conservancy,  
204 Fifth Avenue, Pittsburgh, PA 15222

95. FOOD CHAINS AND ECOSYSTEMS:  
ECOLOGY FOR YOUNG EXPERIMENTERS

Doubleday, 1974

Thirty-nine different environmental experiments that students in the 5th through 8th grades can handle on their own with little or no supervision, with clear introductions and a good bibliography.

From: Doubleday, Department of Library Services, 245 Park Avenue, New York, NY 10017

96. HOW TO USE ERIC: ENVIRONMENTAL EDUCATION

Might be called a field guide to the computers. ERIC is a huge and mystifying system, and separating the useful from the not-so-useful isn't easy. With examples and suggestions.

From: ERIC, Science, Mathematics, and Environmental Education, Ohio State University College of Education, 1200 Chambers Road, Columbus, OH 43212

97. LADYBUGS AND LETTUCE LEAVES

This is a gardening curriculum for grades 5 and 6, designed by the staff of Project Outside/Inside in Somerville (see profile, p. 12). This and several other curriculum aids are available from the project and a list of publications can be obtained.

From: Tracy Barnes, Project Outside/Inside, Carr School, 25 Atherton Street, Somerville, MA 02143

98. A MOUNTAIN TRIP CURRICULUM RESOURCE PACKET

Newton Science Center

Newton teachers and administrators involved in operating and planning an annual trip to New Hampshire's White Mountains have collaborated on a curriculum package of the highest quality. It covers every possible aspect of a mountain field experience from administrative details to student worksheets. Applicable in many situations other than the White Mountains.

From: Newton Science Center, 88 Chestnut Street, West Newton, MA 02165  
(617) 964-9810

99. NATIONAL ENVIRONMENTAL EDUCATION DEVELOPMENT

Silver Burdett Co.

This K-12 environmental education curriculum was produced by a textbook publisher in cooperation with the education specialists of the National Park Service, and it



includes both classroom and field exercises, with teacher guides. Has a good reputation for practicality.

From: Silver Burdett Co., Morristown, NJ  
07960

100. O.B.I.S. (OUTDOOR BIOLOGY INSTRUCTIONAL STRATEGIES)

University of California at Berkeley

These curriculum activities come in the form of a card file including applicable ideas for many focal areas within the general rubric of outdoor biology.

From: O.B.I.S. Lawrence Hall of Science,  
University of California, Berkeley, CA  
94720

101. PROJECT ADVENTURE PUBLICATIONS

In addition to the book Teaching Through Adventure, already listed here, Project Adventure offers an extensive and very useful publications list, every one of which applies to curriculum building. Describes Project Adventure efforts in schools, technical manuals on building outdoor equipment, a guide to insurance liabilities for outdoor educators, and much more. A publications brochure is available from the project. (see profile, p. 36)

From: Project Adventure, Box 157, Hamilton,  
MA 01936 (617) 468-1766

102. PROJECT Q.U.E.S.T.: AN ENVIRONMENTAL CURRICULUM FOR HIGH SCHOOL

The curriculum used by Project Q.U.E.S.T. (see profile, p.38 ). A thorough interdisciplinary approach to teaching environmental concepts through projects and classroom study.

From: Maurice Donnelly, Environmental  
Studies Director, Brockton High School,  
470 Forest Avenue, Brockton, MA 02401  
(617) 580-7609

103. THE RESOURCE NOTEBOOK

The Children's Museum

A book about services and adventures for groups of children, with details on museums, outings, nature study workshops, libraries, crafts, and more.

From: The Children's Museum Teacher Shop,

Museum Wharf, 300 Congress Street,  
Boston, MA 02210 (617) 426-8855

104. SURPLUS PROPERTY

If you qualify under I.R.S. regulations, and almost every educational institution does, you can buy surplus property from the state depot in Taunton. Typewriters, tanks, tables, tires and trucks, and everything in between. All manner of stuff floats through, and if you're outfitting an expedition or just setting up an office you might check here.

From: Massachusetts Department of Education,  
Surplus Property Warehouse, c/o Paul A.  
Dever State School, 1380 Bay Road  
Taunton, MA 02780 (617) 824-4583

105. SOLAR ENERGY PROJECT: AN OVERVIEW

State University of New York

The text explains the project as a whole and excerpts sample exercises and curriculum sections for grades 7-12. Useful as an idea starter, and it contains some good clear plans for building model solar systems. But be forewarned, many who have tried to pry materials out of the D.O.E. have had long waits for materials. It might be worth trying your local office of the D.O.E.

From: Department of Energy, Technical Information Center, P.O. Box 62, Oak Ridge, TN 37830 or Department of Energy, 150 Causeway Street, Boston, MA 02114 (617) 223-0504

106. U.S. GOVERNMENT PRINTING OFFICE

A goldmine, the government publishes an unbelievable array of things from pamphlets on home poultry management to the congressional record. Not all of it is useful, but often interesting, and what's useful is very good. Tell them what you're interested in and they'll send you a partial bibliography. Two favorites: reprints of photographs taken by Walker Evans for the W.P.A., and a wood frame construction handbook that's as good as they come.

From: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402

## VISUAL MEDIA

Photographs, slide shows, films, video, and television, even the good old filmstrip can be an exciting and stimulating teaching tool, if used carefully. It doesn't have to be expensive, and as usual we suggest looking around nearby before you head off to national sources. Maybe someone from a local birding club has a slide show on the birds of your area, or someone from the community may travel frequently and take photographs. The regional offices of the Cooperative Extension Service may be able to provide visual media on land and energy issues, especially farming. Ask around town, see who takes photographs locally, perhaps a check with the town photography shop will yield a real find. Here are a few other possibilities.

### 107. AMERICAN FOREST INSTITUTE

Films on forests and forestry for free loan.

From: American Forest Institute, 96 Harlow Street, Bangor, ME 04401

### 108. APPALACHIAN MOUNTAIN CLUB

A variety of films and slide tapes on environmental areas, particularly conservation, climbing, and camping.

From: Appalachian Mountain Club, 5 Joy Street, Boston, MA 02108

### 109. BOSTON URBAN GARDENERS

A slide-tape of ethnic urban gardens usually planted by community groups examines links to the cultural heritage of the gardeners. A nice tour of Boston's gardens.

From: Boston Urban Gardeners, 66 Hereford Street, Boston, MA 02116

### 110. ENVIRONMENTAL COMMUNICATIONS

This California company has an incredible variety of films, slide collections, and video and photo materials on everything from architecture to pollution. The materials are of the highest quality, and not inexpensive. A catalogue describes everything in detail.

From: Environmental Communications, 64 Windward Avenue, Venice, CA 90291

### 111. ENVIRONMENTAL PROTECTION AGENCY

Government produced films on conservation, energy, pollution, and pollution control techniques, for free loan.

From: E.P.A., 2203 John F. Kennedy Building, Boston, MA 02203

### 112. FLORENTINE FILMS

Larry Hott, of Florentine Films, is assembling a bibliography and review of films dealing with appropriate technology and alternate energy, some of which may be available through his company.

From: Larry Hott, Florentine Films, Box 25, Amherst, MA 01002

### 113. MASSACHUSETTS EDUCATIONAL TELEVISION (MET)

Regularly scheduled educational television offerings often center on environmental themes, and specials may examine some issues in depth. In addition, public television series like "Nova" regularly present informative programming on environmental sciences. Information on what's available in educational television, including teacher guides to using TV and listings of series and specials, can be had through MET.

From: Massachusetts Educational Television  
54 Rindge Avenue Extension, Cambridge, MA 02140 (617) 876-9800 or  
155 Maple Street, Springfield, MA 01105 (413) 739-7271



## V CONCLUSION

*"If I could have made this enough of a book it would have had everything in it."*

*Hemingway, Death in the Afternoon*

It is trite but strangely accurate to say that environmental education in Massachusetts is at a crossroad. Much of what makes the environmentally based work featured in this book so exciting and dynamic is the fact that it is intrinsically involved in the process of growth and change itself. This shifting, adapting cycle seems to produce a vitality absent from many other educational offerings. Because change and evolution are at the basis of any true world view, or understanding of how an ecology functions, environmental education must teach a willingness to adapt and change.

So it is fitting that the programs themselves do the same. And they do, constantly faced with tough decisions and crucial junctures.

In environmental education we have a teaching tool ideally suited to making the most of diminishing resources. It is an open option, limited only by the degree of energy with which we pursue it. In environmental education there are no answers, only more accurate and better informed questions.

OPTIONS IN ENVIRONMENTAL EDUCATION cannot provide answers, but I hope the tour has been interesting, and valuable in some way. Please use whatever support or inspiration this publication provides to do your own work, to expand and grow and struggle. Share. Learn. Live.





Staff in the regional education centers can also be contacted for more information:

GREATER BOSTON REGIONAL EDUCATION CENTER  
54 Rindge Avenue Extension  
Cambridge, MA 02140  
(617) 547-7472

SPRINGFIELD REGIONAL EDUCATION CENTER  
155 Maple Street  
Springfield, MA 01105  
(413) 739-7271

CENTRAL MASSACHUSETTS REGIONAL EDUCATION CENTER  
Beaman Street, Route 140  
West Boylston, MA 01583  
(617) 835-6267

NORTHEAST REGIONAL EDUCATION CENTER  
Mailing address:  
Hathorne Avenue  
Hathorne, MA 01937 (617) 777-3502  
Temporary location:  
Danvers State Hospital  
Route 62  
Middleton, MA

SOUTHEAST REGIONAL EDUCATION CENTER  
Mailing address:  
P.O. Box 29  
Middleboro, MA 02346 (617) 947-3240  
Location:  
Lakeville State Hospital  
Route 105  
Lakeville, MA

PITTSFIELD REGIONAL EDUCATION CENTER  
188 South Street  
Pittsfield, MA 01201  
(413) 499-0745

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## B. CHECK IT OUT:

A GUIDE TO RIGHTS AND  
RESPONSIBILITIES FOR  
MASSACHUSETTS STUDENTS



MASSACHUSETTS  
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PROJECT

SPRING 1980

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### **3. CHECK IT OUT:**

## **A GUIDE TO RIGHTS AND RESPONSIBILITIES FOR MASSACHUSETTS STUDENTS**

**DEVELOPED AND PUBLISHED JOINTLY BY:**

### **THE BUREAU OF STUDENT SERVICES**

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Edward Hasbrouck

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Peter Miller

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**AND**

### **THE MASSACHUSETTS DISSEMINATION PROJECT**

Cecilia M. DiBella, Director

Elizabeth J. Maillett, Publication Coordinator

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*RESOURCES FOR SCHOOLS* is a series of publications developed by the Massachusetts Dissemination Project (MDP) for Massachusetts educators, parents, and students. The project, funded by the National Institute of Education, has four major goals:

- to stimulate greater awareness of the resources available to Massachusetts schools;
- to provide educators, parents, and students with specific information about resources and materials for school programs and services;
- to assist regional education centers and the Department in increasing and improving information services to educators, parents, and students in the state;
- to encourage greater exchange and sharing of resources among educational organizations, service providers, the Department of Education and its regional education centers, and school personnel.

The project is located in the Department's Boston office. In addition, each regional center has designated a staff member who maintains continuous contact and involvement with project activities across the state, and is responsible for working with center staff to improve information and dissemination services in the center. Ultimately, the regional centers will function as switchboards--sometimes providing services directly to schools, other times connecting them with the many existing resources. The development of this series--as its name suggests--is one way the project is helping make these connections. *Please contact a member of the project staff for more information.*

*RESOURCES FOR SCHOOLS* presently available:

1. *A CATALOG OF PUBLICATIONS FROM THE MASSACHUSETTS DEPARTMENT OF EDUCATION* (revised edition, fall 1979)
2. *VIDEO TAPES FOR TEACHING* (being revised)
4. *COMMUNITY INVOLVEMENT IN YOUR SCHOOL: A GUIDE TO PEOPLE, PROGRAMS, AND PUBLICATIONS* (revised, winter 1979)
5. *THE STUDENT'S GUIDE TO SPECIAL EDUCATION* (being revised)
6. *IMPLEMENTING CHAPTER 622: EXEMPLARY PROGRAMS FOR ALLEVIATING RACISM AND SEXISM IN MASSACHUSETTS SCHOOLS*
9. *RESOURCES FOR TRAINING EDUCATORS OF CHILDREN WITH SPECIAL NEEDS*
10. *A RESOURCE GUIDE FOR THE EDUCATION OF GIFTED AND TALENTED STUDENTS*
11. *NEW DIRECTIONS IN GUIDANCE AND COUNSELING SERVICES IN MASSACHUSETTS*
12. *OPTIONS IN ENVIRONMENTAL EDUCATION*
14. *COMMUNITY EDUCATION: AN ACTION HANDBOOK*
15. *IN, OUT, AND ABOUT THE CLASSROOM: A COLLECTION OF SERVICES*



# The Commonwealth of Massachusetts

## Department of Education

---

31 St. James Avenue, Boston, Massachusetts 02116

Fellow Students:

The Massachusetts State Student Advisory Council to the Board of Education is excited to see this handbook, the work of Massachusetts high school students and recent graduates, be published and distributed to the people who can use it to make our educational experience a better one.

The people who wrote this book, some of whom were members of the Student Advisory Council, have not only included our legal rights as students in Massachusetts, but also have explained how these rights can be used responsibly by students who want to get involved to effect constructive, positive change in their schools.

It is important to realize that the rights in this book are accompanied by responsibilities. We expect that the laws upholding our freedoms should be respected; however, we must also realize our responsibility to use these rights wisely, and to respect the rules, regulations, and responsibilities defined by our schools in the schools' handbooks.

With this in mind, it is a responsibility of all students to get involved. We are the consumers of education in this Commonwealth, and so it is our right and our responsibility to help shape the policies that will affect not just ourselves, but secondary school students of the future.

So don't just read this book, but use it, and good luck!

Sincerely yours,

A handwritten signature in cursive script, reading "John A. Anthony".

John A. Anthony, Chairperson  
State Student Advisory Council





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# INTRODUCTION

## *Development of the Handbook*

This handbook explains the laws which apply to students in Massachusetts. It is directed specifically to students so that you can use this material yourselves. The authors of this book are Massachusetts high school students and recent graduates who are affiliated with the Student Service Center, a student-run resource center in the Massachusetts Department of Education. The Student Service Center, among other things, answers students' questions about their rights in school. Through our work, we realized that there was no comprehensive guide to laws affecting students, so we compiled that information. Then we realized that students needed to know how to use what we had written, so we included a second section on strategies for students. We also added a resource section which gives you other helpful information. Check It Out: A Guide to Rights and Responsibilities for Massachusetts Students is the result of our efforts.

This book says a lot about the rights of students. Some people may wonder why the word *responsibilities* does not appear very often in the book. After all, rights and responsibilities are often thought of as "two sides to the same coin". Even though we do not use the word *responsibilities* very often, the need for you, as students, to act responsibly at all times is assumed throughout PART TWO, the action section of the book. In that section we talk about ways for you to be responsible by becoming actively involved in solving school problems rather than just complaining about them. We feel that you, as students, should use information about students' rights in responsible ways, but first you need to have the information. The main purpose of this book is to provide this information to students.

We feel that it is not our role to determine precisely what students' responsibilities are. This is the role of the individual school. Usually such responsibilities are put forth in the form of a set of school rules. The community of people (students and faculty) who are going to be directly affected by these rules should be the ones to decide what those rules are. But the rules a school makes must not deny students their legal rights. So by knowing your rights as students, you can help make sure that your school code of conduct is legal and fair.

## *Why Use This Book?*

We have found that many students are uninformed about the laws which protect them in school. By using this book, you can help ensure that your rights, and those of your friends, are upheld. You will also be able to find out about education-



al opportunities which might be useful to you such as special education or bilingual education. We hope, too, that you will realize the importance of getting involved in solving the problems in your school.

This book covers the legal rights of students. Sometimes rules or sections of your school code that seem unfair may be legal. If your school has rules or policies which you do not feel are in the students' best interests, whether or not they are legal, you have the right and, we feel, the responsibility to try to change them. PART TWO of this book can help you work toward these changes.

## ***How You Can Use This Book***

There are three sections of the handbook. PART ONE explains the rights of students. PART TWO outlines a process for you to follow if you think your rights have not been respected. PART THREE list references to the laws themselves and gives you resources and contacts in case you want further information or help.

We don't expect you to read this handbook from cover to cover. Here are some ways you might use the information.

### **1. A Specific Problem**

If you have a problem in school concerning student rights, or if you know of someone who does, read in PART ONE what laws might apply and then use the suggestions in PART TWO, "If Your Rights Are Violated", to decide what to do about it.

### **2. A Policy Change**

You may think a school policy needs improvement. This handbook will:

- help you identify problems in your school that need attention;
- help you set goals and plan ways to improve the climate of the school through policy change.

### **3. Turning to Others**

You will be able to get more specific help from the organizations listed in PART THREE. They can help you do research, represent you, or refer you to people or materials which can help you.

## F. Researching the Law

The laws that apply to Massachusetts students come from many different sources such as state laws, federal laws, and the U.S. Constitution. You may be interested in reading the actual text of the law. Use the bibliography to help you locate the particular law or court case you have in mind. The bibliography lists the laws referred to in this handbook. It also explains standard legal abbreviations used in citing these laws.

## ***What This Handbook Is Not***

Although we hope this handbook will be useful to you, it is not a cure-all. It won't give complete answers to any specific problem you have in your school. It's not a replacement for a lawyer, nor is it a detailed interpretation of the law. Some of the rights described in this manual are established in Supreme Court cases decided outside the context of public schools. Where a case has not been specifically applied to public schools, its application to public school students is not yet clear. This manual is a preliminary explanation of laws and rights, directed to students and written by students. We wrote it to encourage you to use your knowledge of these rights to deal with your own school's problems. We'd like very much to hear how you're doing. Write us about it:

Check It Out: A Guide to Rights and Responsibilities  
for Massachusetts Students  
Student Service Center  
31 St. James Avenue  
Boston, Massachusetts 02116

These rights apply to Massachusetts public school students. If you are a student in a private school, you may have some of these rights, depending on the type of funding that your school receives. Check with the Student Service Center.





# **PART ONE**

## **YOUR RIGHTS AS A STUDENT**

# A. FREEDOM OF EXPRESSION

*The First Amendment to the U.S. Constitution:*

*Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.*

## General Principles

The First Amendment to the U.S. Constitution protects every student's freedom of expression in schools. You are free to express any ideas in any way you see fit, subject only to certain narrow restrictions on the content of what you say and on the time, place, and manner in which you say it. *Content* restrictions may include obscenity, defamation, and fighting words or incitement, if they are properly defined (see below). *Time, place, and manner* restrictions may include forbidding you from expressing yourself at those times or places or through those methods which substantially disrupt the educational process (see Disruption, p. 7 ). School officials may not prevent you from expressing an idea simply because they do not like or agree with the idea. Your school, for example, cannot stop you from publishing an article simply because it criticizes the administration.

(1) Obscenity. In many cases, speech or material is obscene if, taken as a whole (not just isolated parts of it), it meets *all three* of the following conditions:

- . It appeals to the prurient interests of minors (in other words, arouses lust); *and*
- . It describes nudity or sexual conduct in a way that most adults in the community think is clearly offensive for minors; *and*
- . It lacks serious literary, artistic, political, scientific, or other value for minors.

(2) Defamation. Defamation consists of libel (writing) and slander (speech). In many cases, writing or speech is defamatory if *all three* conditions are true:

- . It damages the reputation of a person; *and*

- . It is not true; *and*

- . The person making the statement knew it was false or recklessly disregarded the issue of whether it was false.

(3) Fighting Words. In most cases, fighting words are those words which, when spoken directly to a reasonable person, are clearly and unavoidably likely to provoke violent retaliation. Whether words are "fighting words" depends upon the particular situation. They might include such things as racial, sexual, ethnic, or religious slurs.

(4) Incitement. In most cases, statements are "incitement" when *both* of the following are true:

- . They are clearly and immediately likely to cause other people to violate laws or valid school rules;  
*and*
- . They are intended to do so.

As with fighting words, "incitement" depends upon the particular situation in which the statement is made.

(5) Disruption. Unless the expression falls under one of the exceptions above, the *content* of what you say is protected, and the school cannot restrict the *activities* through which you say it, unless those activities substantially disrupt the functioning of the school. This is true even if some people think that what you say is "offensive" or "in poor taste". Unless you use fighting words or incitement, you cannot be restricted because other people become disruptive in response to your expression. The question is whether you yourself are disrupting the school. This depends on your *actions* -- including the time, place, and manner in which they occur -- and not the *content* of what you say.

Your school must clearly specify what it means by "substantial disruption". Some examples of substantially disruptive behavior are: physically stopping other people from entering classrooms, distributing literature in the middle of a class, and holding a demonstration which is so noisy that it interferes with classes in session.

## ***Speech***

Freedom to say what is on your mind is one of the principles upon which this country is based. Only recently has the U.S. Supreme Court decided that this freedom also applies in schools. You have the right to speak freely, in and out of class, subject to the limitations on obscenity, defamation,



fighting words, incitement, and disruption listed above.

## ***Symbolic Expression***

You have the right of symbolic expression, which includes wearing buttons, badges, armbands, messages on T-shirts, and other things, subject to the limitations on obscenity, defamation, fighting words, incitement, and disruption listed above.



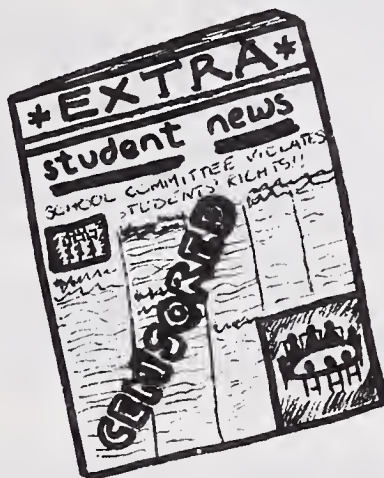
## ***Press***

The First Amendment protects the rights of students to publish and/or distribute any form of literature, subject to the limitations on obscenity, defamation, fighting words, incitement, and disruption listed above. There are two varieties of student publications: those which are "official" and financed by the school, and those which are not sponsored or supported by the administration and are thus "unofficial" or "underground".

(1) Official Student Publications. The content of a student publication may not be censored by the administration. Even if the school supports the paper financially or in other ways, it may not use this power to control the content of your paper. The paper's advisor is there only to advise. She or he cannot decide what is to be printed. Also, the paper's student staff must set fair submissions standards: if they allow a non-staff member to present his or her views, space must be made available for opposing viewpoints.

(2) Non-School Supported Literature. You have the right to distribute at school material that you have published off campus. You can also distribute (on school grounds) written material even if you or another student did not write it. The content of such material may not be censored. You could, however, be sued or brought to court for publishing or

distributing obscene or libelous material (as defined before).



(3) Distributing the Literature. Regardless of whether the material is an official publication or unofficial literature, the school administration cannot require you to submit a copy to them before you begin distribution. The school can require that you give them a copy at the time distribution begins. The school can prohibit distribution at those times or places which substantially disrupt the educational process. Rules in this area must be specific. For instance, the school can prohibit distribution "to students while they are in classes", but it cannot prohibit distribution "whenever classes are in session", since it is not necessarily disruptive to distribute literature to students who have free periods even though some classes are in session.

## ***Assembly and Related Issues***

All students have the right to assemble peacefully. You may gather in large or small groups, formally or informally. Unless the school can show that there is a clear and immediate probability that your actions will substantially disrupt the educational process, you may not be prevented from assembling. The school cannot require you to get permission to assemble unless it has published specific rules which:

- Define assembly (for example, are three students an assembly?); *and*
- Spell out the standards for whether an assembly will be allowed (in other words, spell out a basis for deciding that an assembly will be disruptive); *and*
- State a short, definite deadline for making the decision; *and*

- Spell out a quick, clear appeals process for use if an assembly is forbidden.

Issues related to the right of students to peacefully assemble include:

(1) Outside Speakers. If your school allows some speakers to use school facilities, it may not prohibit others from doing so because they are considered controversial or undesirable. If a person speaks on an issue at school, a student request to hear a speaker on the other side must be honored. For example, if your history teacher brings to your class a person who speaks against the ERA, your request to hear a pro-ERA speaker must be met.

(2) Student Organizations. You have the right to form political and social organizations. For example, if, after hearing a speaker on the subject, you want to form an ERA support committee, you have the right to do so. The school may require you to register your group in order to get school funds. If there is a registration requirement, the school must allow any group to register except those which use "incitement" (as defined on page 7 ). It may require the name of a group contact person but it may not require a membership list. Even if a group is not registered, it has basic rights of free speech, assembly, and literature distribution, subject to the limitations above.

(3) Access to School Facilities. If your school allows some students to use school equipment or facilities, such as public address systems, bulletin boards, or duplicating machines, it must allow all students to use them on the same terms. The school may place reasonable, evenly-applied limits on time, place, and expense. Your school could make a rule allowing a student organization to make up to 500 mimeographed copies per month on the school's machine. But it would have to allow *all* student organizations to make up to 500 copies per month.

## ***Right to Petition***

You have the right under the First Amendment to criticize anything or anyone in the school. You may complain or seek change in any way you wish, such as writing letters, circulating a petition, or organizing a protest meeting, as long as you do not use obscenity, defamation, fighting words, or incitement (as defined above), and as long as you do not substantially disrupt the school. In some cases, grievance procedures have been set up in state or federal regulations (such as those related to student records and discrimination). If you feel your rights have been violated, you can use these procedures to file a complaint, and the school must respond. In



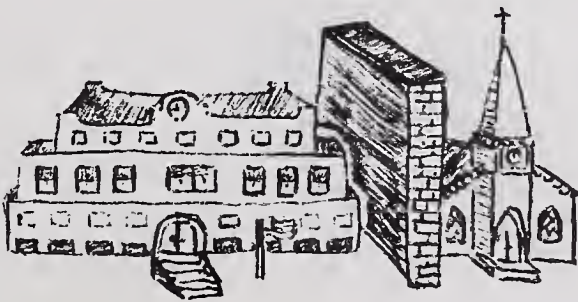


Other cases, unless the school has its own grievance procedure, it need not even answer your complaint, much less make the change that you request. However, you do have the right to complain and to be free from any punishment for doing so. Other actions you can take are outlined in PART TWO of this book.

## ***Religion and Conscience***

The First Amendment to the U.S. Constitution protects every student's right to freedom of religion. You may be absent from school for religious reasons, such as holy days, and you may participate in religious education classes outside of school during school time, up to one hour per week. No public funds may be used for this education or for the transportation to and from such classes.

The First Amendment also protects you by preventing your public school from promoting or supporting a particular religion or religion in general. This means that no religious services or ceremonies can be conducted in a public school or at any school-sponsored activities. The study of religion or of the Bible from a literary or historical point of view is permitted, but the topic must be presented objectively, and the school may not oppose or support any or all religions.



Your school is required to have a moment of silence for not more than one minute, at the start of each day, during which you may pray, meditate silently, think, daydream, or just sit. You are not required to salute the flag, sing the national anthem, or participate in similar activities, and you cannot be required to stand during these activities. However, you cannot be disruptive during this time.

## B. RIGHT TO PRIVACY

### *Appearance*

The Fourteenth Amendment protects your right to choose hair length, clothing, and other aspects of your appearance. The school cannot interfere with this right by punishing you or restricting you from any school activities because of your appearance unless there is an overriding, legitimate school purpose which the school can show to be more important than this right. Such legitimate school purposes include the concern that your appearance poses a genuine threat to health or safety (for example, a bulky coat in gym), or damages school property (for instance, metal cleats on your shoes). "Neatness" and "good judgment" are not legitimate reasons for the administration to regulate your appearance. In gym, your school may require you to wear a T-shirt, shorts and sneakers. A requirement for you to wear a particular brand, type, or color of uniform, is of questionable legality and seems particularly difficult to justify, but this has not been clearly decided by Massachusetts courts.

### *Search and Seizure*

Although the Fourth Amendment prohibits unreasonable searches and seizures, it is not clear how much protection you have in school against being searched or having your locker searched. Different courts have applied these rights to students in school in differing ways. Neither courts in Massachusetts nor the U.S. Supreme Court has ruled on this matter; therefore the rights of Massachusetts students have not yet been established. Outside of school, a search made without a warrant is usually illegal. It is still unclear whether or not school officials need to have a warrant to search you or your locker at school.





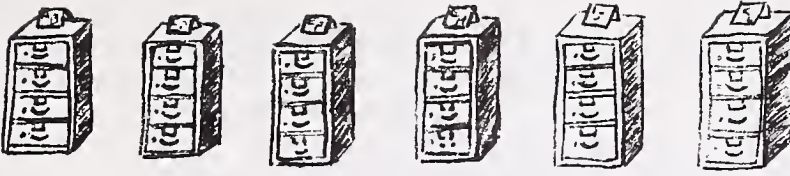
In deciding whether a warrantless search of you or your locker was legal or not, a court would probably ask about the following kinds of things:

- . the relative danger of the conduct being investigated;
- . the reliability of the information that led to the search;
- . whether there was a neutral, objective determination that there was strong reason to expect that the particular items being searched for would be found on you or in your locker;
- . whether the search could have been delayed until a warrant was received without risking that the evidence would be destroyed.

These are questions you probably should consider in deciding whether to challenge the legality of a search at school.

Before deciding to bring to school something which you would not want found by the administration, remember that you do not have clear legal protection against searches in school. If you or your locker is going to be searched, try to have a witness present. You do not have to give your permission for a search, and you cannot be punished for refusing to give your permission. However, your locker may be searched without your permission. If you give your permission, the search is probably legal, and anything incriminating found on you or in your locker may be used as evidence against you. During the search, you do not have to answer questions or give explanation for anything found on you or in your locker. You may talk with a lawyer before answering questions.

Police may enter the school if they have a search or arrest warrant, if a crime has been committed, or if they have been invited by school officials. If you are arrested in school, you have the same rights as you would have outside of school.



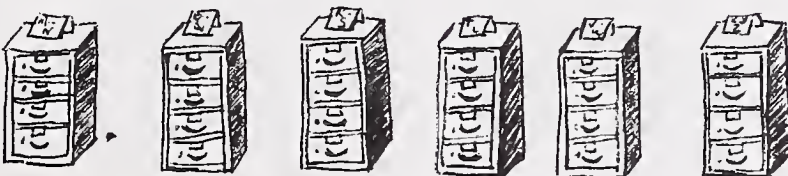
## ***Student Records***

(1) Your "Record". Your student record includes *all information* about you that is kept by the school. No matter where or how it is kept, if it has your name, your student number, or anything else in it that could identify you, it is part of your record. (The only exceptions are personal notes kept by your teacher or counselor which he or she does not share with anyone else.)

(2) Your Rights -- Your Parents' Rights. If you are 14 or older *or* if you are in the ninth grade or above, you and your parents have the right to see all of your record and to control who else sees it. If you are neither 14 nor yet in the ninth grade, only your parents have these rights, unless they give you written permission to see your record. After you are 18 years old you can send a written request to your school which states that you no longer want your parents to have access to your record. Regardless of your age, you have the right to see your transcript (courses, credits, and grades).

(3) Seeing Your Record. When you ask to see your record, the school must show you all of it within two weekdays, even if parts of it are kept in different places. Upon your request, a qualified school professional must explain to you any items it contains. If you want copies of your record, the school must make them for you at cost. You may be charged *only* for the actual cost of making the copies (not more than 10¢ per page, and probably a lot less.)

(4) Other People Seeing Your Record. Sometimes teachers, counselors, or administrators working directly with you can see your record without your permission, but only if they need it to do their job. No one else may see, copy, or be told of any of your record without you or your parents' specific written permission or a court order. You may choose which parts of your record may be released.



(5) Adding and Destroying Information and Making Complaints. You have the right to add information, comments, data, or any other relevant written material to your record. Nothing in your record may be destroyed unless you are notified in writing and are given an opportunity to receive the information before it is destroyed. If you object to any part of your record, you may ask the principal to change or remove it (but you may not change or remove it yourself). If you have any other complaints about the way your record has been handled, see your principal.

(6) Appeals. If you are not satisfied with a decision the principal makes about your record, you may follow an appeals process which is spelled out in the Student Records Regulations. A copy of the Student Records Regulations must be made available to you by your school for free.

## ***Experiments on Students***

(1) Drugs. You cannot be given psychotropic (mind-altering) drugs for research or experimental purposes. Although the usual reason for giving students drugs is to control "problem" behavior, you may not be given drugs, even for "therapeutic" reasons, unless the doctor certifies that you have a legitimate medical need for the drug and unless both you (if you are 12 or older) and your parents give permission. If you or your parents object, you have the right to an administrative review by the state Commissioner of Public Health. The school may not punish you or take you out of your regular class for refusing to accept drugs. You may only be given drugs against your will if you are under 18, *and* the Commissioner finds that you have a legitimate medical need for the drug, *and* your parents consent. If you need a psychotropic drug, then you qualify for special educational services under Chapter 766 (see page 18).

(2) Educational Experiments. If you are involved in any program testing new or unproven teaching methods, your parents have the right to inspect all textbooks or other teaching materials used in the program. If parents object to such materials, they could let the local school committee know. The school committee has the power to decide what textbooks are used in schools.



## C. YOUR RIGHTS TO AN EQUAL EDUCATION



### ***Discrimination***

Discrimination exists in many forms. It exists in any policy or practice which prevents or discourages students from participating in any school activity due to their race, color, sex, religion, national origin, or handicap. If you are attending a public school, even if you are not an American citizen, you are granted the same rights as all other students there. There are several laws which prohibit discrimination in education. They are: the Massachusetts State Constitution, Chapter 622 of the Acts of 1971 (a state law), Title IX of the Educational Amendments of 1972 (a federal law), Title VI of the Civil Rights Act of 1964 (a federal law), and Section 504 of the Rehabilitation Acts of 1973 (a federal law). The Chapter 622 regulations specify the responsibilities of schools for ensuring equal rights. Some of your rights under Chapter 622 are given below along with the procedures for complaining about discrimination in your school.

(1) Admissions and Separate Courses. Your school may not discriminate in admitting students and may not assign students to different or separate courses or activities on the basis of sex, race, color, religion, national origin, or handicap. The regulations cover all extra-curricular activities such as student government, language clubs, drama clubs, etc. They also cover interscholastic and intramural athletic activities. The only exception to the regulation is that a school may establish separate male and female teams for interscholastic competition in a particular sport, *provided* that both teams are granted equal instruction, training, coaching, access to facilities, equipment, and opportunities to practice and com-

pete, and that funds for athletics are fairly distributed. If a school offers only one interscholastic team in a particular sport, such as field hockey, soccer, or football, students of *both* sexes must be allowed to try out for that team.

(4) Guidance and Counseling: Tracking. According to Chapter 622, your guidance counselor must inform you about all educational and career opportunities without regard to your race, color, sex, religion, or handicap. For instance, she or he may not advise girls to be nurses rather than doctors because of their sex. Remember that your guidance counselor is merely an advisor and may not limit what you do after high school. Your school may not channel or "track" students into certain programs or classes. For instance, it may not push minority students into "general" programs and away from "college prep" programs on the basis of race, nor may it make decisions on the basis of discriminatory tests that are unfair to students from minority cultures.

(5) Facilities. Every new school building, as well as every addition to existing buildings, must be planned to insure equal educational opportunities for all students. The facilities must be equally available without regard to the race, color, sex, religion, national origin, or physical handicap of any student.

(6) Discipline. Your school cannot punish one student more severely than another based on race, color, sex, religion, national origin, or handicap. Higher suspension rates for blacks than for whites, or for boys than for girls, may be the result of subtle discrimination.

(7) Complaint Procedure. If you feel that your rights under Chapter 622 have been violated, you may complain to the superintendent of schools. The school committee must respond to your complaint in writing within 30 days, and must report your complaint and its response to the Bureau of Equal Educational Opportunity (EEO) in the Department of Education. The Bureau of EEO will conduct its own investigation to ensure that your school is following Chapter 622. Violations of Chapter 622 may result in the withholding of funds by the state or other legal action by the Attorney General.

## ***Students with Special Needs***

Under Chapter 766 of the Acts of 1972, the Massachusetts Comprehensive Special Education Law, you must be given an adequate education even if you need special services instead of, or in addition to, the school's regular program.

(1) Entitlement to Special Educational Services. You

are entitled to special educational services if you meet all three of these requirements:

- you are between the ages of 3 and 21 years old;
- you have not obtained a high school diploma or its equivalent (you do not qualify if you have graduated); and
- you have a disability (physical, emotional, or otherwise) that keeps you from progressing effectively in a regular class.

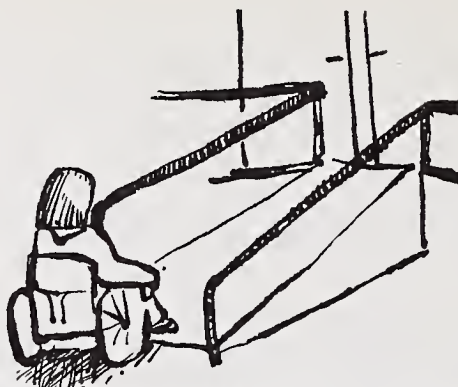
A student is not entitled to special services merely because she or he is intellectually gifted. However, an intellectually gifted student who has other difficulties, such as physical problems or emotional problems, may be entitled to special services.

(2) Procedures. Any school official (including a teacher or counselor), a court official, a social worker, your family doctor, or your parents or guardian can request that you be evaluated to decide whether you have special needs. If you are under 18, you may ask any of the above people to request evaluation for you. The state regulations establish detailed procedures for an evaluation by a team of people who work directly with you in school (usually your teachers, guidance counselor, school principal, and others). If the team decides that you need special services, they will write a detailed, individualized plan for your education. If you are 14 or older, you have the right to participate in all meetings related to your evaluation and the writing of your educational plan. If your parents object to the school system's choice of an educational plan, and all attempts to reach a compromise fail, they may appeal it to the state Bureau of Special Education Appeals. If your parents wish, they can reject your educational plan and, unless it would be physically dangerous or seriously disruptive to others, insist that you be put in the school's regular program.

(3) Students' Rights under Chapter 766. Chapter 766 assumes that your parents are acting in your best interest, although you may disagree with their decisions. Therefore, most of the rights to control your education and to influence the 766 process are given (if you are not yet 18) not to you, but to your parents. However, the following rights are yours regardless of your age:

Unless you are seriously dangerous or disruptive, you may stay in your present program until your evaluation, the writing of your educational plan, and any appeals have been completed.





- Under federal law, qualified handicapped students are to be provided an equal opportunity to participate in all aspects of the public school program, both academic and extra-curricular, and may not be discriminated against on the basis of handicap.
- If you have special needs or if you are in the middle of the evaluation or appeals process, you should not be suspended or otherwise excluded from your school program for more than ten days unless the state Department of Education agrees that you are substantially disruptive, or that your health or safety is endangered.
- If your own doctor decides that you will be absent for at least 14 days but less than 60 days in any school year for medical reasons, the school must provide a teacher to tutor you. If you are going to be absent 60 or more days for medical reasons, you must have an evaluation to determine what kind of special services you need.
- At home or in the hospital, you must receive instruction that covers the same material, at the same rate, as your program at school, unless your doctor recommends otherwise. You must receive instruction before 4:00 p.m. on the days that your school is in session. Your instructor must keep records of both the material that you have covered and of the progress that you have made.

(4) Pregnant Students. If you are pregnant, you have the right to stay in school, and your school may not change your schedule or put you in a special class. The school may require you to be put under a physician's care, at your own expense, throughout your pregnancy. If your doctor determines that you should stay at home or in the hospital for 14 days or more, your school must provide you an education at home or in the

hospital.

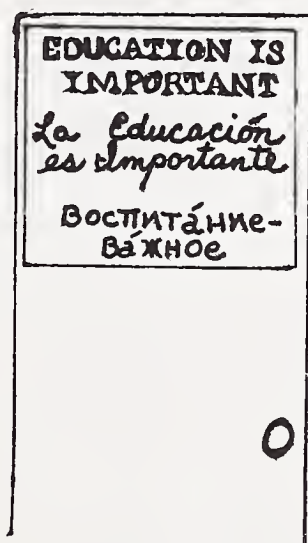
The Department of Education can provide you with a booklet called the Student's Guide to Special Education. It is available in English, Spanish, Chinese, Portugese, Greek, and in Braille and on tape.

## ***Bilingual Education***

Regardless of whether or not you were born in this country, if your native language is not English, and you cannot perform your regular classwork in English, you qualify for Transitional Bilingual Education (TBE).

A TBE program includes instruction in the following: all courses which are required by law and by the school district; the reading and writing of English; the history, culture, and geography of your parents' native land; and the history and culture of the United States. Courses are at first taught in your native language, and then to an increasing degree, in English.

Every year, your local school committee must conduct a census to determine how many students in your school district are of limited English-speaking ability. If there are 20 or more students in one language group who need a Transitional Bilingual Education (TBE) program, one must be established for that group.



If you are placed in a TBE program, your parents must receive written notification in both English and in their native language, within ten days of your enrollment in this class. If your parents do not want you in this class they have the right to visit your classes and meet with your teachers to discuss your progress or any problems you may have.

If you are a student in a TBE program, you may stay in the program for three years, or until you reach a level of English language skills that allows you to perform successfully in classes which are taught in English. You may remain in a TBE program for longer than three years only with the approval of the school committee and your parents.

Your Transitional Bilingual Education classes must be with students of about the same age; that is, there may be not more than a three year difference between the oldest and the youngest child in your TBE class. You have the right to participate with other non-TBE students in courses that are not greatly dependent on English speaking skills, such as art, music, and physical education. The maximum number of students in a TBE class is 15 (20 if a teacher's aide is assigned to the class).

If your school does not offer a TBE program for your language group, the school may (but is not required to) send you to another school which does have a TBE program in your language. If your school does not provide you with a TBE program, it must provide a tutor or other support services, or a course in English as a Second Language (ESL).



## D. YOUR RIGHT AND RESPONSIBILITY TO BE EDUCATED

### *School Attendance*

Every person in Massachusetts has the right to attend, free of charge, the public school of the city or town where she or he lives. This means even if you are not living with your parents, you can attend school in the town where *you* live. If you are living temporarily there for the sole purpose of attending school in that town, then you may be charged tuition. No one may be discriminated against in admission to a public school of any town, or in obtaining the advantages, privileges, and courses of study of any public school, on account of race, color, sex, religion, national origin, or handicap.

The city of Boston is an example where students legally are assigned to schools according to race. In September, 1974, the city of Boston began to implement a court-ordered plan for the desegregation of the city schools. In the U.S. District Court's opinion, the city had failed to provide equal educational opportunity to all students, because the schools were segregated. In other words, the court felt that some students were being denied their rights to the full advantages of education in the city schools and that the only way to correct the situation was to desegregate schools by assigning students to schools based on the student's race. The court feels that the desegregation process is correcting the effects of discrimination.

All secondary schools must be open at least 180 days (5 1/2 hours in length) or 990 hours per year. You must attend school if you are between the ages of six and 16, except in certain circumstances specified in state law. Your school must excuse you for up to seven days or 14 half days of other necessary absences in any period of six months.

If you are absent from school without a valid excuse for seven day-sessions or 14 half-day sessions within any period of six months, your parents could be fined up to two hundred dollars for causing or attempting to cause a student to skip or boycott school.

### *School Fees*

A school fee is any charge a school requires a student to pay in order to participate in an activity. An example would be a school requiring students to buy or rent gym uniforms from the physical education department. On the other hand, a requirement that your parents pay for school property which you damaged is not considered to be a school fee.

Because you are entitled to a free public education, it is questionable whether the school can legally charge a fee for certain activities or require you to purchase certain materials. It is clear that you cannot be charged for required courses or activities. It is less clear whether fees for extra curricular activities, such as clubs or school-sponsored social events can be charged. Even these may well be illegal under Massachusetts law, and unconstitutional. Even if it were decided that a fee was legal, you could not be excluded from school or from any school activity because you had not paid the fee. To recover the fee, the school would have to sue your parents (if you are under 18). Again, even if a fee is legal, you cannot be denied report cards, diplomas, or copies of your other school records as punishment for not paying a fee. (See p. 15 on the right to copies of your records.)

## E. OTHER RIGHTS

### ***Rights of Eighteen Year Olds***

Eighteen year olds enjoy certain rights in school that other students do not have. When you turn eighteen, you have the legal rights of an adult. However, the school can continue to keep your parents informed about your progress and whereabouts, unless you request otherwise. (See Student Record Regulations, pg. 6 ). The school cannot require that your parents sign your report card or sign permission slips for field trips. You, as an adult, can give yourself permission to go on a trip.

Your school cannot require that you have absence notes signed by your parent. If school officials wish to verify the truth of your absence note, they may require the signature of another adult. This person does not have to be your parent; she or he could be another eighteen year old student who is in a position to provide such verification.

Your school can notify your parents that you were absent, unless you forbid such notification when you become eighteen. (See Student Record Regulations, pg. 6 ).

### ***Curriculum Innovation***

If parents of thirty high school students from the same high school sign a petition requesting a new course, and if a qualified teacher can be found, that course must be taught. This can apply to physical education courses, but it does not include activities which are not for credit, such as interscholastic sports. The course must be offered on the same basis as other courses (in terms of hours, credit, etc.). The petition for the course must be submitted to the school committee by August 1 prior to the school year in which the course is to be taught. The Department of Education can provide you with a pamphlet called Curriculum Innovation, on how to start a new course in your school.

### ***School Meals***

Your school must serve lunch. All school meals must meet state and federal nutrition standards. Some students are entitled to free or reduced price lunches, depending on family income and family size. Some schools serve breakfast as well as lunch. If you are entitled to free or reduced price lunches and if your school serves breakfast, you are also entitled to free or reduced price breakfasts. Check at your superintendent's office for the Policy Statement for Determining Eligibility for Free and Reduced Price Meals and Free Milk to see the maximum amount students can be charged for a reduced price meal.

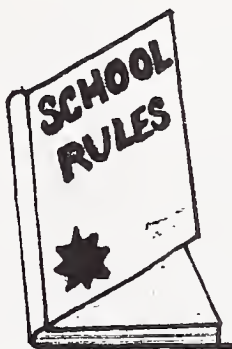


Your school may not discriminate against students getting free or reduced price meals, and must take responsible steps to ensure that other students cannot tell which students get free or reduced price meals. For example, if you get free or reduced price meals, you may not be required to eat at a different place or time, eat a different meal, go through a different entrance or serving line, or use meal tickets or tokens different from those of students getting full price meals. You may not be prevented from buying food in addition to the regular lunch (such as dessert or extra milk).

At the beginning of each school year and whenever the standards for eligibility are changed, your parents must be sent a notice of your school's meal program and an application for free and reduced price meals. You may apply for them at any time during the year. The school must accept or reject your application within ten working days. If the school denies your application, your parents have the right to appeal this decision, to have a fair hearing on their appeal, and to have you receive free or reduced price meals until the appeal is denied.

## F. DISCIPLINE: GROUNDS FOR PUNISHMENT

The school has the power to enforce school rules by punishing you if you break rules. However, there are limitations on a school's authority to punish you. You can only be punished if you have broken a rule that is published, specific, and within the legal power of the school to adopt (as described below).



### ***Published Rules***

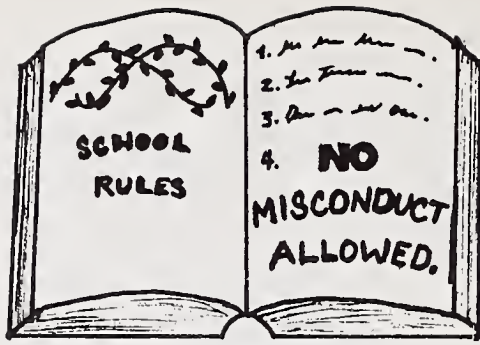
Under Chapter 71 Section 37H of the Massachusetts General Laws, no school rules can be enforced unless they have been published, approved by the school committee, and a copy of them has been filed with the state Department of Education. Punishments to be given for breaking rules must also be published and filed. The school committee must also file a certification that a free copy of the rules is given to anyone who requests it.

This law means that you may not be punished for breaking an unwritten rule or a rule made after your action. This does not mean that, if your school has no published rules, school officials must watch helplessly as you commit dangerous, violent, or substantially disruptive acts. They may restrain you while you are actually committing a dangerous act or threatening to commit such an act.

In addition, a school official, like anyone else, may make a citizen's arrest if you have committed a felony (a serious crime), or if you have committed a misdemeanor (a less serious crime) in his or her presence. However, if she or he cannot prove that you actually committed a crime, you may sue and collect money damages for false arrest and imprisonment.

### ***Specific Rules***

You may not be punished for doing something unless the school rules give you fair warning that you may be punished for doing it. Rules cannot be so vague that people of ordinary intelligence must guess at their meaning. For example, a rule



prohibiting "conduct annoying to school staff members" is too vague because different things are annoying to different teachers and therefore you cannot reasonably predict whether or not a particular act would be found annoying. Here is an example of a vague rule, followed by a way to make it more specific. The words inside the boxes are from a hypothetical handbook.

(too vague)                      Insolence or insubordination is not allowed.

(more specific)                      Students shall not deliberately refuse to carry out a staff member's request if that request is reasonable, has a legitimate purpose, and is within the authority of that staff person to make.

Punishments for breaking rules must also be specific. The school does not have to specify a particular punishment for each type of offense. This would be unreasonable, because it does not allow for different circumstances. However, the school must give a fair warning of what punishment you may be given, by listing either the maximum penalty for each type of offense or the guidelines to be followed in setting penalties, such as amount of disruption caused, whether bodily injury resulted, and the number of previous offenses. The following is an example of a stated punishment which is too vague. We have also provided an example of one way to make the statement more specific.

(too vague)                      The following behaviors may result in suspension

1. Cutting class
2. Fighting
3. Excessive tardiness



The following behaviors may result in suspension:

(more specific)

1. Three unexcused absences (defined in Attendance section of handbook)
2. Physical fighting
3. Five unexcused class tardies (defined in Attendance section of handbook)

Determination of the length of suspension will depend upon the circumstances in the individual situation. (See Due Process section of handbook).

## ***Purpose of Rules***

School rules must be directly related to the educational program. You can be punished only for conduct which is related to a school sponsored activity. For example, you can be punished for seriously disrupting a class. On the other hand, you cannot be punished in school for being arrested by the police in an incident away from school.

Rules governing your conduct in school must have an educational purpose. For example, a rule about being late to school relates to a student's education, but one which prohibits long hair, "tasteless clothes", or being married or pregnant does not. However, school rules are presumed to be related to legitimate educational purposes. If you feel that a rule is not serving such a purpose, the burden of proof is on you to show it.

## ***Overbroad Rules Violating Students' Rights***

Any rule is illegal if it violates any of your rights or punishes you for exercising any of them. If a rule could be used to restrict conduct protected by the First Amendment as well as conduct which the school can legally regulate, the rule is overbroad and therefore illegal. The following is an example of an overbroad rule, and a way to write a more limited rule:

(overbroad)

Student demonstrations are not allowed.

This rule is overbroad because some demonstrations might be disruptive and others would not be. Instead, the rule must be narrowly written so that only the disruptive assemblies are forbidden:

(more limited)

Student demonstrations which are so noisy that classes in session are substantially disturbed are not allowed.

In general, rules regulating conduct similar to that protected by the First Amendment must be even more specific than other rules. This is because freedom of expression is so important that schools must be extremely careful not to restrict this freedom while they carry out their legitimate responsibilities.

## G. DISCIPLINE: FORMS OF PUNISHMENT

If you are going to be suspended from school or suffer other serious loss of educational benefits, you are entitled to due process of law under the 14th Amendment to the U.S. Constitution. This means the school must follow certain fair procedures before it can give you certain kinds of punishment. Specific procedures for due process are outlined with certain specific forms of punishment below.

### ***Corporal Punishment***

Corporal punishment in schools is illegal in Massachusetts. Therefore, school staff may not hit, spank, or physically punish you in any way. If this happens, you may be able to collect money damages from the person(s) responsible through a private lawsuit. A school staff member may, however, use reasonable force to prevent you from injuring yourself or another student or in order to protect him or herself from physical injury.

### ***Short-Term Suspension***

If you are faced with suspension for ten days or less, you are entitled to a hearing where you will receive the following:

- 1) an oral or written notice of the charges against you,
- 2) an explanation of the basis for the accusation, and
- 3) an opportunity to present your side of the story.

The hearing must take place before the suspension begins unless your presence at school endangers people or substantially disrupts the academic process. If immediate suspension is necessary, the hearing must follow as soon as possible.

If there is substantial disagreement about the facts, or if the suspension will result in other, more serious penalties (such as the loss of your job, your removal from an athletic team, or missing important tests which cannot be made up), then you probably have the right to more due process procedures. These include the right to question the witnesses against you, the right to present witnesses, or other procedures needed to reach a fair decision.

In any case, you must be told the maximum length of your suspension. Also, the school cannot *require* that your parents come to school for a conference before you can be readmitted. The school may request that your parents come, but you may not be punished more because your parents do not come.





## ***Expulsion and Long-Term Suspension***

The school committee may not expel you (permanently exclude you) from the public schools for misconduct without first giving you and your parents a fair hearing. It is not absolutely clear what your rights are at this hearing, but based on fairly consistent lower court decisions, you are probably entitled to the following:

- 1) written notice of the charges;
- 2) the right to be represented by a lawyer or another person acting on your behalf;
- 3) adequate time to prepare for the hearing;
- 4) the right to question witnesses against you; and
- 5) a reasonably prompt written decision including specific grounds for the decision.

The above rights may apply to long-term suspensions (more than 10 days), although the law is not entirely clear on this. The hearing must be held before the suspension or expulsion begins, unless your presence in school poses a physical danger to you or to other students, or will substantially disrupt the educational process. If it is necessary to exclude you before the hearing, you must be given a hearing as soon as possible. If you are to be expelled, your hearing will be before the school committee.

## ***Disciplinary Transfers***

Your school cannot transfer you to another school for disciplinary reasons, unless you are given due process. This

means that it must give you notice of its intent to transfer you, the reasons for the transfer, and a hearing before the transfer takes place. Depending on the circumstances, you might be entitled to all the procedural rights you would have in a long-term suspension.

## ***Assignment to Special Classes***

Because of Chapter 766, the special education law, you cannot be placed in a special class unless you are evaluated and found to have special needs that can be met only in a special class (a class where you receive extra services and help that you cannot get in a regular class). This means that you cannot be put in a special class for disciplinary reasons. If your parents disagree with your assignment to a special class under Chapter 766, they can appeal the decision through a process stated in the Chapter 766 Regulations.

## ***Informal Exclusion***

If you are told or asked to leave school without a hearing, without notification of when you will be allowed to return, or without notification to your parents, you are being informally excluded. This is illegal; you may not be suspended or expelled unless you are given due process as described in the sections above on "Suspension" and "Expulsion".

## ***Withdrawal of Privileges***

Your school may not suspend or revoke any of your privileges, such as participation in a school organization, an elected school office, or an activity unless this punishment is provided for by a specific published rule (see page 27). In addition, you must be told why you are being punished this way, and you must be given some chance to present your side of the story. You may be entitled to even more due process procedures, depending, in part, upon how long the punishment will last.

## ***Academic Punishment***

Some schools reduce students' grades for disciplinary reasons. For example, some schools lower a student's grade a certain amount for each unexcused absence (including absence because of suspension) or fail any student who misses a certain number of classes, regardless of the student's academic performance. These practices have been found illegal in other states, but have not yet been tested in Massachusetts. It is, however, clearly illegal to reduce a student's grade as punishment for expressing opinions in a manner protected by the First Amendment.

<p><b>*REPORT CARD*</b> JOHN DOE</p>
<p><b>ENGLISH BF</b></p>
<p>John was absent five (5) times, so I lowered his grade. <i>LM</i></p>

## ***Exclusion from Graduation Ceremonies***

Some schools refuse seniors the right to participate in their graduation ceremony as punishment for wrongdoing, or for reasons unrelated to school (such as pregnancy), even if they have met all academic requirements for graduation. This practice has been found illegal in other states, where courts have said a student who has met academic requirements for graduation can only be excluded from the graduation ceremony if the school can demonstrate that the student will actively disrupt the ceremony. The practice of excluding students from the graduation ceremony for reasons unrelated to the ceremony itself has not yet been tested legally in Massachusetts.



**IF YOUR RIGHTS ARE  
VIOLATED**

**PART TWO**

*In order to make this section clearer, we have created a hypothetical case. This case will be referred to throughout the section.*

*P.J. is a high school student. She, for various reasons, was tardy (late to school) five times over the course of a quarter. On the fifth absence the principal sent a note home which said that P.J. was to be suspended one week for her tardiness. P.J. realized, having read Check It Out: A Guide to Rights and Responsibilities for Massachusetts Students, that this was not legal because she had been suspended without a hearing of any kind.*

*In a situation like P.J.'s, there are many possible actions a student could take. Planning your action is crucial for successfully achieving your goal. There are four important steps to this process. They are:*

- (1) researching and establishing the facts*
- (2) choosing a goal*
- (3) planning a course of action*
- (4) taking that action*

## **A. RESEARCHING AND ESTABLISHING THE FACTS**

If you were in P.J.'s position, your first step would be to identify all the factors involved in the situation. The following section outlines some questions which should be helpful in that process.



(1) Has a violation occurred? Check your school codes. Has the school violated its own rules? Are these rules published or unpublished? Are they on file with the Massachusetts Department of Education? Enforcing an unpublished rule or one that is not on file with the Department of Education is a violation in itself (see p. 27). Check the state and federal laws discussed in this booklet. Was a state law violated? Was there possibly a violation of your constitutional rights? In P.J.'s case, there was a denial of the right to a fair and impartial hearing. This hearing is required by the due process clause of the 14th Amendment to the U.S. Constitution. By denying P.J. her hearing, the school was in violation of the Constitution.

(2) What are the surrounding facts? You can start by listing the people involved in the situation, where it occurred, and what actually happened. Then consider some surrounding facts. In P.J.'s case, these might include: why was P.J. tardy? Was it due to unavoidable problems at home? Has P.J. had past problems with this teacher? Was there a general "crackdown" on student discipline going on?

Put yourself in some other people's shoes for a minute to help you gain a different perspective on your situation. How would teachers view it? administrators? other students? You need to be honest with yourself in assessing your situation in order to set realistic goals and plan effective strategies.

If there was a violation of the law, why did it happen? Is the administration aware of the law? Was P.J. warned beforehand of the possibility of suspension? Was there an attempt to work out the situation in any other way?

(3) Whom does this problem affect? Are you the only person affected? Is this the first time it's happened to you? Is this an isolated incident or has it occurred before? Are you being singled out for some reason? In P.J.'s case, for example, was suspension chosen instead of a less serious punishment because she is a poor student or a "troublemaker"?

Does this situation affect other people in school? For example, it's possible that the policy leading to P.J.'s suspension has caused the suspension of other students in the school. Does the policy or practice affect some groups of students and not others (based on race, grade level, club, or other reason)?

Have there been other questionable policies that have had a similar affect on students? Were students aware that these policies were possibly illegal? If so, what did they do about it? What effect, if any, did their actions have in changing the school policy? It will be helpful for you when setting your goals to know what students have done in the past.



(4) Who makes the policies and why? Who created the policy in question? Is there a legitimate need for it? What is the intended purpose of the policy? Sometimes administrators feel a need for a policy because of certain things that have happened or because of their general assumption about students. What are those events and those assumptions? How much care is taken to find out students' feelings about a policy before it goes into effect? Were students involved at all in creating the policy? If so, were the students representative of the student body? How extensive was their involvement? Were they given adequate information about the potential effects of the policy and about relevant laws and regulations?

Gathering information on the governance of the school, assessing the attitudes of the administration, faculty, and students, and finding out how policies are established will tell you a lot about how the school is run, and may be very important in choosing your goal.

## B. CHOOSING A GOAL: "WHAT DO I WANT TO ACCOMPLISH?"



Below are listed some goals that you might choose. These are not all the possible ones, and not all of these will be useful in any particular case. Be careful and plan ahead because some of the goals listed may not be for you. Possible goals range from the correction of your individual problem to major changes of policy or practice.

If you choose to deal with this problem on a personal basis, there are two goals you should think about: *correcting the violation itself and making up for the past wrongdoing* caused by the violation. In P.J.'s case, correcting the violation itself might mean getting back into school immediately. Getting an apology and some help in making up missed work would correct the wrongdoing caused by the violation. In addition, if P.J. were illegally punished, she would have the right to have all records of the incident destroyed.

These personal goals may be all you want to accomplish, but they also can be used as a stepping stone for dealing with broader issues and for linking up with other people's concerns. P.J., for example, might want to extend her goals to *changing the policy or practice* on tardiness. If a particular policy is either outdated, invalid, or illegal, it probably should be changed. Changing policy may take some time, but the success of a change will be both rewarding to you and beneficial to your peers and school community.

There might be need for *changing a larger area of policy*. Instead of attempting to change only the suspension policy, P.J. might try to obtain a whole new discipline code for her school. By working for a new code, P.J. not only would solve her own problem, but she might bring far-reaching change that could bene-

fit the whole school community.

In your effort to initiate change, you should realize that a personal risk is involved. Students working for change are not always looked upon favorably by administrators and even fellow students. You might want to consider *forming a group* that could give you support, add strength to your cause, and help others with similar problems. Establishing an organization with such intentions is a worthwhile goal in itself. Not only could the group deal with the specific problem it was developed to solve, but it could also work on other problems of common concern. In addition, creating a group is another way to have students and members of our communities involved in decision-making processes.

By this point, you are ready to choose a goal. You have asked yourself questions to help you analyze what happened and what you would like to accomplish. You have read examples of some possible goals and now you are ready to decide what your objectives are.

The goal you choose should be based on:

- . your personal needs
- . the support you have
- . careful analysis of the real problems
- . the practicality of the goal
- . the time and involvement you are willing to put into it
- . the effect upon other people

Whatever goal you choose, be careful in planning your steps and make sure you are fully aware of the real issues involved.



## C. PLANNING A COURSE OF ACTION: "HOW WILL I REACH MY GOAL?"

*Establishing your course of action is the key to achieving your goal and must be chosen carefully. Perhaps role playing could help you foresee the response of others and the potential success of a tactic. P.J., for example, could assume the role of a student and have a friend play the principal, to give P.J. practice in responding to the principal. This type of "thinking ahead" will help you choose the correct strategy.*

*Of course many courses of action fit into more than one of the categories we have created. You will probably have to use more than one kind of strategy. While keeping your goals in mind, continue to reassess and revise your strategies.*

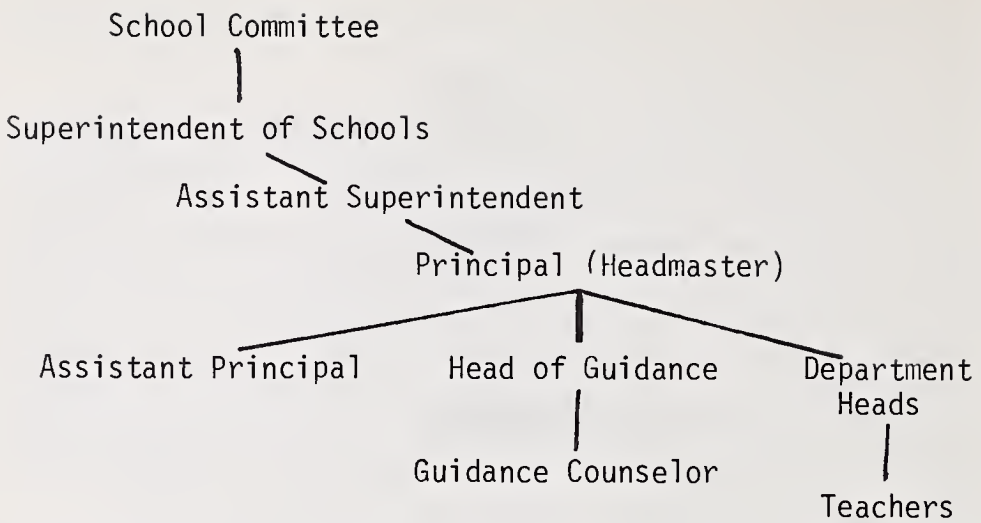
### **Using Conventional School Channels**

These strategies include talking to people directly involved, using formal appeals processes, and presenting your case to more influential people in the system. This course of action is often a wise way to affect change, especially when people in your school's administration are receptive to students' opinions, when they are presented in a clear and responsible manner.

Even if you are at odds with the school, you may still be able to use the "power structure" of the school effectively. If you talk to the person directly involved with the problem, you may find that the situation becomes clearer to both of you. In your meeting, you can present your side of the story and the other person can explain their side. Maybe then he or she will be more sympathetic to you and might even give you helpful suggestions. For example, P.J. was suspended for being late to homeroom. Therefore, she may want to talk directly to her homeroom teacher about the suspension.

You could also go to a school body designed to deal with problems within the school. Many schools have a Grievance Board designed for this purpose. Does yours? If it does, you may find it a swift and effective means to solve your problem. If your school does not have a Grievance Board, would it benefit from having one? (see pg. 45, Organizing a Group)

If your meeting with the person does not accomplish much, and if the school Grievance Board proves insufficient, you may want to move further up the chain of command of your school. If you have already gone to a teacher, you may want to go to the department head, head of guidance, or an assistant principal. If this person does not help, you can go to the person above him/her, and so on up the ladder:



You will have to decide at what level of the public schools you want to start. Keep in mind that someone lower on the list may have more time for you than someone higher up. If the first step you take is to go to the superintendent of schools, she or he may refer you to a lower level, or may simply have more "important" things to do.

On the other hand, there could be advantages to starting at the top. The school committee and superintendent have more power than a faculty member and might be able to act more quickly.

You may find that the administration will be more responsive to a group than to an individual. For that reason, working with a group could be a useful strategy.

## ***Organizing Support***

These tactics include working with existing organizations, petitioning, and organizing a group of concerned students, teachers, or community members. Often change only occurs when people are united in their demands for change. P.J. may have wanted to organize a group of students who are concerned about students being illegally suspended. This group might be more effective in changing the policy than P.J. alone would be.

(1) WORKING WITH EXISTING ORGANIZATIONS. There are probably a few organizations at the local level which can help you. They include:

. Student Advisory Council. A group of students elected from schools all over Massachusetts who work on student concerns in education. Two students from each high school in the state serve on a regional council. Six state council delegates are elected from each regional group. The chairperson of the state council also serves as a full

voting member on the Massachusetts Board of Education for one year.

. Student Advisory Council to the School Committee. By state law, every school committee must meet at least once every other month with a five member student advisory committee elected from the student body. The purpose of the student committee is to bring student concerns to the school committee, to advise the school committee, and to inform the student body of school committee actions and concerns.

. Student Council. The traditional channel for students to deal with issues that are important to them in school. The council is comprised of elected representatives from the student body. The council at your school has the option of affiliating itself with regional, state, and national Associations of Student Councils.

. Parent-Teacher-Student Association (PTSA). A group of parents, teachers, and students from a school who work to help the school in various ways. The school administration often uses the PTSA to measure parent (and student) opinions on education issues.



In Boston, a number of community-based councils have been established as a result of desegregation. There may be similar school/community groups in other areas. If such groups do not exist in your community and you feel that it would be helpful to start one, you may want to contact these organizations. They might provide suggestions on how to set up similar groups.

. Racial-Ethnic Student Council (RESC). Members come from the student councils according to a plan outlined by court order for the city of Boston. These councils have a variety of possible purposes. The three broad purposes provided by the court for the RESC are:



1. to investigate racial disturbances
2. to open communication channels among different racial/ethnic groups of students
3. to insure racial harmony within each school

. Racial-Ethnic Parent Council (REPC). Members are elected from the parent population at each school. The REPC, like the RESC, is a court-ordered group. The council's main purpose is to deal with racial problems and to promote an environment of understanding and common purpose among the various elements of the community.

. Community District Advisory Council (CDAC). Each of the nine districts in Boston has a CDAC. They consist of ten parents who are representatives of bi-racial councils and as many as ten other members who represent business, labor, police, teachers, school administration, universities, or community groups. CDAC's must meet at least once a month but they may meet more frequently. Their primary function is to monitor compliance with Phase II of the desegregation plan at the district level and to act as an advisory group to district school personnel. They also serve as a support group for the RESC and the REPC which means support for students and parents.

. City-Wide Parents Advisory Council (CPAC). Comprised entirely of parents from each of the nine school districts who are members of individual school REPC's. This council's primary function is to aid and support the work of the local bi-racial school councils (REPC's and RESC's). CPAC also has strong lines of communication with the court involved in desegregation.

. Boston High School Student Coordinators (BHSSCs). A staff of students representing Boston's 19 high schools who deal with issues relevant to desegregated education. They have worked on many different student concerns, such as bilingual education, student government, and student rights.

. Boston Student Advisory Council (BSAC). A city-wide student government. It has four members from each high school: two acting delegates elected from the student government; and two non-voting alternates, one appointed by the faculty senate and another by the headmaster. The president of the BSAC is a non-voting member of the school committee.

The concerns of these groups vary, so you will have to "feel out" what those concerns are. Talk to members of the

group, see what their interests are. Find out if they have worked on problems similar to yours or if they are looking for an opportunity to deal with such issues. For example, a student government which has usually worked on social affairs might want to get involved in the revision of a school discipline procedure. Your problem could provide the motivation for them to take action on matters of discipline.

It's also important to find out where the group fits into the structure of the school. Is it a group created by or under the guidance of the administration? Was the group set up by students? by teachers? by parents? Consider how the administration views the group, and how students, teachers and parents view it. Does the group relate closely to the student body? Are students aware of the group's activities? Once you've learned what the group does, you can decide how you want it to deal with your problem. The activities of a group can vary from organizing publicity to speaking to the administration or to the school committee. The group may be able to provide valuable resources and support.

Think about the degree of commitment that a group will have to your cause. What can be done if a group that you wish to work with does not want to become extensively involved? Try getting them to help you in some smaller ways. They might issue a written position on your cause, or gather information which you can use to take action.

(2) ORGANIZING A GROUP. If there are no existing groups that can help you with your problem, you could form one to deal with the issue. You have a legal right to do so. (See pg. 9, Right to Assemble). When forming a group, there are three major areas to consider: how to structure and run your organization, how to attract members, and how to keep people interested.



(a) How to structure and run your organization. Consider carefully how large you want the group to be. There are advantages and disadvantages to both large and small groups. With a large group, you not only have more ideas represented, you have more hands to do the work. It is important that everyone has a job to do and feels a part of the group. A large group also shows greater support for your cause. But getting people together to discuss plans and progress may be more difficult with a large group than it would be with a small group. Although in a small group communications and group structure are easier to handle, the group will probably not be representative of as many students as a large group could be. One possibility is to start off with a nucleus of people and get larger as strategies, goals, and general operations become more complicated.

Consider who you want in your group. Should you have just students or do you think administrators, parents, and teachers should be involved? If you want parent or teacher support on an issue, it might be useful to have either representation from these groups or to arrange special meetings with them.

For example, suppose the student council in P.J.'s school decided to form a group to review school disciplinary procedures as a result of P.J.'s case. The involvement of administrators could be important, since they have the power to change the policy in question. The students might also want to involve teachers and parents in this process either on a formal or informal basis. The student government should think carefully about the advantages and disadvantages of working with various groups.

Teachers, parents, and others could be formal members of the group or be part of an informal resource network of interested people. This network could serve as a basis for support and information. One question is whether students will be intimidated by the adults present. All too often when older people get involved with a student group, the students become very quiet. Another question when considering representation from outside groups is whether the group is likely to support your views or not. If a group is strongly opposed to what you're doing, their involvement could hinder your efforts. Think about all the various people whose involvement might assist your group, and build a careful strategy for choosing your group membership.

How do your peers and other interested people view your group? Do they consider your group difficult to communicate with and to approach with a problem? To keep this from happening, it is important that you keep your contacts and especially your peers informed of what your group is doing and how the group's efforts affect them. Keeping contact with other groups is very important to the success of your group. They can be a resource for you when you need help or support in your work.



Remember that people are much more willing to share information and help you when they feel involved and aware of what is happening.

Also, think about meeting times and places. If you can, meet in school on school time. See what your school's regulations are concerning group and club meetings. The same rules would apply to you. If you can't meet in school, use someone's house or a clubhouse.

When you have long-term goals, it is crucial to make a timeline to lay out what tasks need to be done at what time. Make sure the time line is followed as much as possible.

(b) How to attract members. Approach people who have had similar problems. A common interest is vital. Broaden your goals to make them of interest to more people. For example, if P.J. is concerned with changing the suspension policy rather than just getting herself back into school, she is more likely to attract support from others. Publicize around school that you are looking for people to join your group. Word of mouth can be an effective tool. Put up posters, hand out leaflets, post notices on the bulletin boards (see page 8, Non-School Supported Literature, and page 10, Access to School Facilities), or write a letter to the editor of the school or local newspaper. Explain to other students that they are affected by the rules, though they may not have had a voice in creating them. If people are made aware of what is wrong, you may find them willing to help make some changes.

(c) Keeping people interested. Meetings that are disorganized and non-productive may quickly defeat your purpose. Careful planning of your meetings is essential. You should chair the first meeting, but later it's advisable to have a different chairperson at each meeting. This will aid in generating a feeling of shared responsibility in the group. If P.J. were to chair every meeting, then people might view the issue as P.J.'s, not one which affects the whole group.

As a chairperson, you have three basic responsibilities:

- *Make sure you follow an agenda (a list of topics to be discussed).* The agenda must be planned in advance and should be followed at the meeting. An agenda will tell people why they are there and will help people stick to the topic. Encourage group members to suggest possible agenda items for later meetings. Identify your goals, and get other people's reactions.

- *Make sure everyone has an opportunity to talk.* One of the worst things that can happen to a group is to have a few people dominate it. Encourage some of the quiet people

in the group to speak about an issue or question. Make sure everyone is aware of what's happening. This can be accomplished by having each agenda item clarified and reviewed as you finish dealing with it.

*. Make sure something is accomplished at every meeting.* People can talk around and about issues forever, but this gets very little accomplished. Make sure that tasks to be done are identified and that people take responsibility for them. Have people report on tasks they have done since the last meeting. By showing current and prospective members of your group that something is constantly going on, you'll show them that being a member of your group is worthwhile.

Keeping your constituents informed and involved is important to the operation of your group. Your peers will be one of the most influential of your support groups. Take time to find out the needs of your constituents and make sure they know what the group is doing. Hold workshops to find out what other students feel about the school and about your activities. Try holding a meeting open to all students. Always let it be known that membership in your group is open. By using activities such as these, you'll be able to get students involved who don't normally get involved, thereby building broad-based student support.

Organizing a group may help you deal not only with your problem but also with other student concerns. Your problem may have identified a need which could be the basis for an ongoing group. Forming a group is not an easy task; it demands a lot of time and planning. We've talked about various aspects of group organizing from attracting members to running meetings. The most critical element of group organizing is effective communication. The group needs to have lines of communication flowing among its members and to its peers and other contacts. Through good communication, group members are able to be active participants and are sure of what others are doing. Also, their peers know that they are accomplishing something, which will help keep them involved.

Another key to organizing is thinking ahead. Carefully laid out strategies concerning your group membership, activities, and actions will make the group much more effective. If you see there is a need, whether it affects an individual or group, you should consider forming an organization to deal with it.

(3) PETITIONING. In addition to working with existing organizations, or establishing your own group, petitioning can be an effective way to *ORGANIZE SUPPORT* for your cause. A petition is the statement of a request or demand that something should be done -- for example, that a school policy be changed -- followed

you a number of signatures of people supporting the statement. You have the right to petition the school administration in an effort to change any policy or practice, subject to the provisions mentioned before (see pg. 9).

Petitions usually say something like "We, the undersigned students (and/or parents, teachers) of Hall Memorial High School, propose that..." (whatever the proposal is). Make sure your statement is well defined, and try to explain briefly the reasoning behind it. Supply enough space for each signer's name. Either keep the original petitions or make copies for yourself. The copies can be used both as a back-up should one copy be lost, and as a resource list when you need help in the future.

Petitions can be used to draw attention to your problem. They will also show that a number of people are concerned about the problem. The organized support shown by the petitions, while having no legal weight, will put pressure on the people to whom the petitions are given. It is hard to ignore a stack of petitions, so the more names you get the more effective a strategy it will be.

A petition's overall effectiveness hinges constantly on when it is made. It should be planned with other strategies, so that its impact comes at the most advantageous time.

## ***Getting Additional Support and Guidance***

Contacting organizations such as the Student Service Center, the Massachusetts Department of Education, advocacy groups, or a lawyer can be useful. The assumption here is that established organizations and groups may have more experience and resources for handling certain issues. Such organizations can help you by giving advice, coming to meetings with you, or assisting in planning your course of action. They might also have the authority to order the school to correct the unlawful policy.

Across the state there are six STUDENT SERVICE CENTERS. They are staffed by high school students who are eager to inform you of your rights and give you assistance. The staff at the centers are well-informed about the laws that affect students. In most cases, the centers will be able to assist you with your problem and if need be they can refer you to other branches of the Massachusetts Department of Education.

The Department of Education has the responsibility of enforcing the education laws of the Commonwealth. If your rights were violated and you could not work things out with other existing organizations, the Department of Education could be of great help to you. You can contact them for assistance in getting your school to comply with the law. The Department of Education has the power to bring legal action against a school which is in vio-



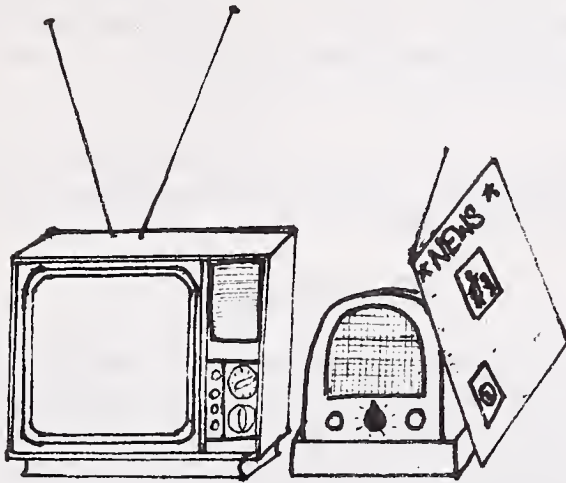
lation of the law. However, don't let outside assistance be a substitute for student and community involvement. You should remain active in your own efforts, and keep in touch with the agency which is working for you to make sure progress is being made.

There are other organizations that might be able to help you. These groups can give you legal advice and work with you to help you solve your problem. Many such "advocacy groups" are mentioned in the Resources section in this book (see p.53 ).

If you are unable to resolve a dispute by any other means, you may want to consider a lawsuit. Before taking such action, contact a lawyer and find out if it would be an effective strategy. If you decide to sue, keep in mind that suing the school can be very slow and expensive. If you lose, you may be worse off than you were before you sued. On the other hand, if you win, you may be able to get a court order very quickly and the court may make the school pay for your legal fees. In any case, do not threaten the school with a lawsuit unless you really mean it, and contact a lawyer before making any move. Also, as mentioned before, do not let the lawyer be a substitute for other strategies involving students and the community.

Getting help from any of these places can provide you with both support and advice. Outside organizations not only have the familiarity with certain issues, but often they have the power to force other organizations to do something (i.e., comply with a law). Through their expertise, knowledge, and power, outside groups could help you achieve your goal.

## Using the Media



Careful use of both school and community media may help you reach your goal. Many people might want to help you accomplish your goals, but they can't help if they don't know about the problem. If you can inform a large number of people, you may be able to get much more support. Of course, you only want to publicize a situation if you need public support.

You may want to publicize your issue in school. If you have sympathetic students on your side, or students who have been in a similar situation themselves, your job may be easier. Try to get your problem covered in the school newspaper. Ask the editor to write an article, or send a letter to the editor. Also, see about using newsletters, daily announcements, or the school radio station. If you want to publicize on a more personal level, distribute leaflets, buttons, or armbands. You have the constitutional right to freedom of expression (see p. 6 ), so use your creativity.

You may find that you want community support as well as school support. The local newspaper may be an effective way to publicize your cause. Contact the editor or education reporter and try to persuade her or him to do an article. You can also submit press releases for publication, or write a letter to the editor.

Radio and television stations often have half minutes of air time for citizens to express their concerns. Stations are required, under Federal Communications regulations, to provide a certain amount of time for brief public service announcements. Contact the stations and ask about it.

If you are planning a large meeting, consider inviting the media. A little publicity can be very helpful.

In trying to get media coverage, establish personal contact with the editor or news director. A telephone call or personal visit to the newspaper office or television station is likely to be much more effective than just sending a press release or a request for news coverage in the mail.

For example, a visit to a local newspaper office where P.J. presents a personal account of her story may be an effective way to get needed exposure.

## ***Conclusion***

P.J.'s case is just a hypothetical one, but the concepts we presented can be applied to many of the problems you might face in your school. One of the best ways of learning this material is to put it to use in real situations. We hope you'll do just that and share what you're learning with others.



# RESOURCES

## PART THREE

# A. ORGANIZATIONS

## *Student Service Centers*

The Student Service Centers are run by high school students for the benefit of students and other people with educational questions or problems. They can provide information, assistance and referrals on questions about legal rights or anything else related to students. There are six regional offices:

*Boston:*

31 St. James Avenue  
Boston, MA 02116  
(617) 727-7040 or 7041

*Central Massachusetts:*

Beaman Street, Route 140  
West Boylston, MA 01583  
(617) 835-6266

*Greater Boston:*

54 Rindge Avenue Extension  
Cambridge, MA 02140  
(617) 547-7472

*Northeastern Massachusetts:*

215 North Street  
North Reading, MA 01864  
(617) 664-5723

*Western Massachusetts:*

155 Maple Street  
Springfield, MA 01105  
(413) 739-7271

*Southeastern Massachusetts:*

P.O. Box 29  
Middleboro, MA 02346  
(617) 947-3240

## *Massachusetts Department of Education*

The best people to contact for any problem are probably the Student Service Centers. Below are listed other offices within the Department of Education that may be helpful in specific areas of students rights (all are located at 31 Saint James Avenue, Boston, Massachusetts 02116) and also have staff in the regional offices.

*\*Bilingual Education:*

Bureau of Transitional  
Bilingual Education  
(5th floor)  
telephone (617) 727-8301

*\*School Meals:*

Bureau of Nutrition Education  
and School Food Services  
(5th floor)  
telephone (617) 727-5764

*\*Discrimination:*

Bureau of Equal Educational  
Opportunity  
(5th floor)  
telephone (617) 727-5880

*\*Special Education:*

Division of Special Education  
(6th floor)  
telephone (617) 727-5770

*\*Student Advisory Councils*

Bureau of Student Services  
(5th floor)  
telephone (617) 727-7040

## ***Other Organizations***

Below are listed some of the organizations interested in students' rights that may be able to provide assistance to students who believe that their rights have been violated:

### *\*Massachusetts Advocacy Center*

2 Park Square  
Boston, MA 02116  
(617) 357-8431

Provides advocates to work with individual students who believe their rights are being violated. They are particularly interested in students' right to education, special education, child health (both physical and mental), the protection of children used as research subjects, the juvenile justice system, and access to public information. They also research on law-related school issues. No charge for services. Advice given over the telephone.

### *\*Civil Liberties Union of Massachusetts*

58 Devonshire Street  
Boston, MA 02109  
(617) 742-8020

Handles violations of Constitutional rights. Since it is a small organization, it can only handle a limited number of cases itself. If it doesn't take your case, it will try to refer you to another organization or to a private lawyer who will help. No charge for services.

### *\*Office for Children*

120 Boylston Street  
Boston, MA 02116  
(617) 727-8900

State agency for children under age sixteen. Coordinates services (such as day-care facilities, temporary shelters for runaways, and programs for institutionalized children) provided for children by different state agencies. Provides information, referral, and advocacy services for individual children.

### *\*Legal Services Offices*

Boston area:  
Greater Boston Legal Services  
27 School Street  
Boston, MA 02108  
(617) 742-8930

Neighborhood offices of lawyers who handle a variety of cases. Funded by the federal Legal Services Corporation. Your family's adjusted income must be below a certain level in order to be



eligible. No charge for services. For information on the nearest office in other parts of the state, call a Student Service Center.

\*Center for Law and Education

Gutman Library

6 Appian Way

Cambridge, MA 02138

(617) 495-4666

Publishes a variety of information on student rights and other legal issues in education. Provides legal back-up assistance to legal services offices (see above) on cases involving school

### 3. PUBLICATIONS

#### *Laws and Regulations*

*\*Directory of Massachusetts Education Laws.* Published in looseleaf form and updated periodically.

From: Merrimack Education Center, 101 Mill Road, Chelmsford, MA 01824. \$4.00

*\*A Compilation of Federal Education Laws.* Updated periodically.

From: Office of the Assistant Commissioner for Legislation, U.S. Department of Health, Education, and Welfare, Office of Education, Room 4131, 400 Maryland Avenue, S.W., Washington, DC 20202. Free.

*\*Chapter 622: Regulations Pertaining to Access to Equal Educational Opportunity.* Adopted by the Board of Education 4 June 1975.

From: Student Service Centers and from the Bureau of Equal Educational Opportunity, Massachusetts Department of Education, 31 St. James Avenue, Boston, MA 02116. Free.

*\*Title IX Regulations.* Federal regulations on sex discrimination.

From: Office of Civil Rights, Department of Health, Education, and Welfare, RKO Building--Government Center, Bullfinch Place, Boston, MA 02114. Free.

*\*Regulations Pertaining to Student Records.* Adopted by the Massachusetts Board of Education 24 February 1976.

From: Student Service Centers. Free.

*\*Regulations for the Implementation of Chapter 766 of the Acts of 1972: The Comprehensive Special Education Law.* Adopted by the Board of Education October, 1975.

From: Student Service Centers and from the Division of Special Education. Free.

*\*Policy for Determining Eligibility For Free Milk and Free Meals and Reduced Price Meals.*

From: your school district's superintendent of schools. On file and available for inspection.

*\*Regulations Pertaining to the Use of Psychotropic Drugs in the Public Schools.* Adopted by the Public Health Council 3 August 1974.

From: Massachusetts Department of Public Health, 600 Washington Street, 2nd floor, Boston, MA 02111. Free.

## Other Publications

*\*The Constitutional Rights of Students: Analysis and Litigation Materials for the Student's Lawyer.* P.M. Lines, editor. March, 1976. Thorough, up-to-date explanations of the legal principles that give students their rights. Extensive explanations of major court cases. Written for lawyers rather than for students or other laypersons.

From: The Center for Law and Education, Gutman Library, 3rd floor, 6 Appian Way, Cambridge, MA 02138, (617) 495-4666.  
\$7.00

*\*Model Code of Student Rights and Responsibilities.* December, 1975. Paul Weckstein, editor. Contains model provisions on non-discrimination, freedom of expression, privacy, discipline, due process, student participation in decision-making, and other areas which could be adopted by a school and built into your student handbooks.

From: The Center for Law and Education (see above). \$1.50

*\*Student and Youth Organizing.* Written by and for students. The definitive book on how to take action to change your school.

From: Youth Liberation, P.O. Box 524, Brooklyn, New York 11215. \$1.50 (or as much as you can afford to pay)

*\*Making School Work: An Education Handbook for Students, Parents, and Professionals.* Despite the title, written almost entirely for parents, but an excellent reference anyway. Summarizes students' and parents' rights and gives some helpful suggestions on how to get school officials to respect them.

From: The Massachusetts Advocacy Center, 2 Park Square, Boston MA 02116, (617) 357-8431. \$3.95.

*\*The Rights of Students: The Basic ACLU Guide to a Student's Rights.* Alan Levine. New York, Avon Books, 1973. Excellent coverage of the subject and very clear writing, but deals only with rights of students nationally (rather than with rights specific to Massachusetts students).

From: Many paperback bookstores. \$.95.

*\*Up Against the Law.* A very brief handbook for students. Has a particularly good description of the juvenile court system.

From: The Massachusetts Lawyers Guild, 595 Massachusetts Avenue, Cambridge, MA 02139. Free.

*\*Law and the Student Press.* George E. Stevens and John B. Webster. Ames, Iowa State University Press, 1973. Written as a handbook for the college, high school, and underground press. Includes advice on postal regulations, common school



ules, and various other things you might run into, in addition to information on the First Amendment, libel, obscenity, and other aspects of the law.

From: The Student Press Law Center, 1750 Pennsylvania Avenue, N.W., Washington, DC 20005. Free.

*\*Legality of Student Disciplinary Practices.* Edward C. Olmeier, The Michie Company, 1976. Takes a generally conservative viewpoint in reviewing court cases from around the country. Written primarily for school administrators.

From: The Michie Company, Charlottesville, VA 22902.

*\*A Student's Guide to Special Education.* Written by and for students. Probably the best, most understandable source of information on special education and Chapter 766.

From: the Student Service Centers and from the Division of Special Education, Massachusetts Department of Education. Free.

*\*Privacy in Massachusetts: Your Rights Under the Law.* June, 1976. Describes all types of privacy rights, including those related to educational records, with references to the specific laws and regulations from which the rights come.

From: the Security and Privacy Council, Room 212B, State House, Boston, MA 02133. Free.

*\*Curriculum Innovation: Recommendations for the Implementation of Chapter 215 of the Acts of 1972.* For starting courses requested by parents of 20 students. Approved by the Board of Education 26 November 1974.

From: Student Service Centers. Free.

*\*Recommendations for the Election and Operation of Student Advisory Committees to School Committees.* Approved by the Board of Education 26 November 1974.

From: Student Service Centers. Free.

## C. BIBLIOGRAPHY

This bibliography includes the laws, regulations, and court decisions on which our rights are based. If you need help in finding out about the law, contact any of the Student Service Centers.

Most court case citations consist of a number, an abbreviation, and another number. The first number is the volume, the abbreviation stands for the series of volumes in which the law or decision is located, and the second number is the page. Citations of court cases also include the names of the parties involved in the case, the date of the decision, and the court that made the decision. For example, "Antonelli v. Hammond, 308 F. Supp. 1329 (D. Mass. 1970)" refers to the case in which John Antonelli sued James J. Hammond. The decision was made in 1970 by the United States District Court for the District of Massachusetts. The text of the decision may be found in volume 308 of the Federal Supplement, beginning on page 1329.

Abbreviations used in this bibliography are as follows:

c.	chapter
C.F.R.	<u>Code of Federal Regulations</u> (Federal regulations are first issued in the <u>Federal Register</u> , which is published daily. The <u>Code of Federal Regulations</u> is the compilation of all federal regulations in effect.)
D. Mass.	United States District Court for the District of Massachusetts (the lowest level of federal court)
F.	<u>Federal Reporter</u> (decisions of the Circuit Courts of Appeals)
F. 2d	<u>Federal Reporter, Second Series</u> (continuation of the same set of volumes as the <u>Federal Reporter</u> )
F. R.	<u>Federal Register</u> (see C.F.R.)
F. Supp.	<u>Federal Supplement</u> (decisions of the United States District Courts)
1st Cir.	United States Court of Appeals for the First Circuit (the middle level of federal court; handles appeals of several United

States District Courts, including the one for the District of Massachusetts)

- Mass.      Massachusetts Reports (decisions of the Supreme Judicial Court, the highest Massachusetts state court)
- M.G.L.      Massachusetts General Laws (a collection of all Massachusetts state laws in effect)
- N.E.      Northeastern Reporter (decisions of the highest state courts of several states, including Massachusetts)
- N.E. 2d      Northeastern Reporter, Second Series (continuation of the same set of volumes as the Northeaster Reporter)
- s.      section
- St. ####      Acts and Resolves of the General Court for the year #### (laws passed by the Massachusetts state legislation during its #### session)
- U.S.      United States Reports (decisions of the United States Supreme Court, the highest federal court. Every Supreme Court decision is published in three different places: the United States Reports, the Supreme Court Reporter, and the Lawyer's Edition)
- U.S.C.      United States Code (a collection of all federal laws)



A. Freedom of Expression

General Principles

Tinker v. Des Moines Independent Community School District, 393 U.S. 503 (1969) [public school case; free expression generally; symbolic speech; standard for determination of "disruption"]

M.G.L. c. 71, s. 82, 85, 86 [freedom of expression guaranteed to students at local option]

Papish v. Board of Curators, 410 U.S. 667 (1973) [college case; may not prohibit vulgar material unless it is legally obscene]

M.G.L. c. 727, s. 28, 31 [obscenity with respect to minors defined and prohibited]

Miller v. California, 413 U.S. 15 (1973) [non-school decision; standard for determination of obscene material]

New York Times v. Sullivan, 376 U.S. 254 (1964) [non-school decision; standard for libel of elected public officials]

Chaplinsky v. New Hampshire, 315 U.S. 568 (1942) [non-school decision; standard for determination of "fighting words"]

Healy v. James, 408 U.S. 169 (1972) [college case; standard for determination of "incitement"]

Speech

Tinker [see above]

Press

1. Official School Publications

Antonelli v. Hammond, 308 F. Supp. 1329 (D. Mass. 1970) [school-supported newspaper]

2. Non-School Supported Publications

Mello v. School Committee of New Bedford, C. A. No. 72-1146F (D. Mass. 6 April 1972) [unpublished de-

cision; literature distribution]

Riseman v. School Committee of Quincy, 439 F. 2d  
148 (1st Cir. 1971) [public school case;  
literature distribution]

Vail v. Board of Education of Portsmouth School Dis-  
trict, 354 F. Supp. 592 (D. N.H. 1973) [public  
school case; prohibits prior review affecting  
student distribution]

### Assembly

Coates v. Cincinnati, 402 U.S. 611 (1971) [non-school  
case; demonstration]

Grayned v. City of Rockford, 408 U.S. 104 (1972) [re-  
strictions on student demonstrations]

M.G.L. c. 264, s. 8 [displaying a foreign flag or em-  
blem on the outside of a school building is a  
criminal offense]

M.G.L. c. 266, 2. 98 [defacing or vandalizing a school  
building is a criminal offense]

M.G.L. c. 272, s. 40 ["willfully disturbing" a school  
building is a criminal offense]

### 1. Student Organizations

Gay Students Organization of New Hampshire v. Bonner,  
509 F. 2d 652 (1st Cir. 1974) [college case; so-  
cial activities by student organization]

Healy v. James, 408 U.S. 169 (1972) [college case;  
official recognition of student organization]

### 2. Access to School Facilities

Bonner-Lyons v. School Committee of Boston, 480 F. 2d  
442 (1st Cir. 1973) [equal access to school media  
facilities]

M.G.L. c. 71, s. 71 [school committee may permit use  
of facilities by outside groups for certain pur-  
poses]

## Right to Petition

45 C.F.R. 80.7 (b), (c), (d) [complaints of discrimination on account of race, color, or national origin]

45 C.F.R. 86.8 [complaints of sex discrimination]

45 C.F.R. 99.60, 99.63 [complaints under the federal law on student records]

School District of Abington Township v. Schempp, 374 U.S. 203 (1963) [voluntary prayer or Bible reading is unconstitutional]

Zorach v. Clauson, 343 U.S. 306 (1952) [released-time religious education is constitutional]

Constitution of Massachusetts, Amendment Article 46, s. 1 [free exercise of religion is not to be restricted]

Attorney General v. School Committee of North Brookfield, 199 N.E. 2d 553 (1964) [required Bible reading under M.G.L. c. 71, s. 31 is unconstitutional]

Commissioner of Education v. School Committee of Leyden, 358 Mass. 776, 267 N.E. 2d 226 cert. denied 404 U.S. 849 (1971) [voluntary religious exercises under M.G.L. c. 71, s. 1B are unconstitutional]

M.G.L. c. 71, s. 3 [students may be excused from military drills in physical education classes if they have religious objections to them]

M.G.L. c. 71, s. 30 [all teachers must impress their students with virtue and morality and teach the evils of vice; apparently not yet tested in the courts]

M.G.L. c. 71, s. 57 [students may be excused from physical examinations if they have religious objections to them]

M.G.L. c. 71, s. 69A [plaque reading "For God and Country" may be placed in a prominent place on any public school building; apparently not yet tested in the courts]

M.G.L. c. 71, s. 348 [remedies for refusal to furnish copy of transcript]



M.G.L. c. 76, s. 16 [complaints of wrongful exclusion from school or denial of admission]

M.G.L. c. 151C, s. 3, 4 [complaints of sex discrimination]

The following state regulations have specific appeals processes:

Chapter 622 Regulations s. 9.00, 10.00 [complaints of sex discrimination; see Resource List]

Chapter 766 Regulations [complaints and appeals relative to special education; see Resource List]

Regulations Pertaining to Student Records, s. 8.0, 9.0 [complaints about material in students' records or non-compliance with the regulations; see Resources, p. 57]

Policy Statement for Determining Eligibility for Free and Reduced Price Meals and Free Milk, s. F, G, [complaints and appeals relative to school food programs; see Resource List]

### Religion and Conscience

United States Constitution, Amendment 1

#### 1. Religion

Engel v. Vitale, 370 U.S. 421 (1962) [required reading of a nondenominational prayer is unconstitutional]

M.G.L. c. 76, s. 1 [absences permitted for religious reasons]

M.G.L. c. 76, s. 15 [students may be excused from vaccinations if they have religious objections to them]

#### 2. Conscience

West Virginia State Board of Education v. Barnette, 319 U.S. 624 (1943) [required salute to the flag is unconstitutional]

Gaines v. Anderson, 421 F. Supp. 337 (D. Mass. 1976) [required moment of silence for meditation or prayer under M.G.L. c. 71, s. 1A is constitutional]

M.G.L. c. 71, s. 69 [flag salute required (unconstitutional)]

B. Right to Privacy

Appearance

Richards v. Thurston, 424 F. 2d 1281 (1st Cir. 1970)  
[hair length and appearance]

M.G.L. c. 71, s. 83, 85, 86 [freedom of appearance  
guaranteed to students at local option]

Search and Seizure

United States Constitution, Amendments 4, 5, 6, 7,  
and 8

M.G.L. c. 119 [juvenile court proceedings]

Student Records

20 U.S.C. 1232G [federal student record law--Family  
Educational Rights and Privacy Act (the Buckley  
Amendment)]

45 C.F.R. Part 99 [regulations for the Buckley Amend-  
ment]

M.G.L. c. 71, s. 34A-34E [state transcript and student  
record laws]

Regulations Pertaining to Student Records [adopted by  
the state Board of Education; see Resource List]

Experiments on Students

45 C.F.R. 46 [protection of human subjects]

M.G.L. c. 71, s. 54B [psychotropic drugs]

St. 1972, c. 766 [special education law; codified as  
M.G.L. c. 15, s. 1M-1Q; c. 71B, s. 1-14; c. 76,  
s. 1]

Chapter 766 Regulations [adopted by the state Board  
of Education; see Resource List]

Regulations Pertaining to the Use of Psychotropic  
Drugs in the Public Schools [adopted by the state  
Public Health Council; see Resource List]

20 U.S.C. 1232H [parents may inspect teaching materials]

## Your Rights to An Equal Education

### Discrimination

Bray v. Lee, 337 F. Supp. 934 (D. Mass. 1972) [sex-segregated public schools are illegal]

20 U.S.C. 1681 [sex discrimination in federally funded educational programs -- Title IX]

20 U.S.C. 1701-1721 [discrimination by public schools on account of sex, color, race, or national origin]

42 U.S.C. 2000d [discrimination on account of race, color, or national origin in federally funded programs]

45 C.F.R. 80 [sex discrimination in education]

45 C.F.R. 86 [discrimination on account of race, color, or national origin]

Constitution of Massachusetts, Amendment Article 106 [state equal rights amendment; prohibits discrimination on account of sex, race, color, religion, or national origin]

M.G.L. c. 76, s. 5 [prohibits discrimination by public schools on account of race, color, sex, religion, or national origin--Chapter 622]

M.G.L. c. 151C [prohibits some forms of discrimination in education; provides grievance procedures]

Chapter 622 Regulations [adopted by the state Board of Education; see Resource List]

### Student with Special Needs

Ordway v. Hargraves, 323 F. Supp. 1155 (D. Mass. 1971) [pregnant students cannot be excluded]

29 U.S.C. 794 [Rehabilitation Act of 1973, also known as "Section 504", discrimination against the handicapped in federally funded programs is prohibited]



20 U.S.C. 1401 et. seq. [Federal Education of the Handicapped Act, also known as "Public Law 94-142"]

St. 1972, c. 766 [special education law; codified as M.G.L. c. 15, s. 1M-1Q; c. 71B, s. 1-14; c. 76, s. 1]

Chapter 766 Regulations [adopted by the state Board of Education; see Resource List]

Stuart v. Nappi, 443 F. Supp. 1235 (D. Conn. 1978)  
[discipline restrictions of special needs students]

Howard S. v. Friendswood Independent School District,  
454 F. Supp. 634 (S.D. Tex. 1978) [discipline restrictions of special needs students]

### Bilingual Education

M.G.L. c. 71A [transitional bilingual education law]

#### D. Your Right and Responsibility to be Educated

M.G.L. c. 15, s. 1G [Board of Education may establish minimum length of school day and school year; Board of Education may set ages for compulsory attendance]

M.G.L. c. 71, s. 37 [school committees may regulate attendance]

M.G.L. c. 71, s. 48 [textbooks and other school supplies must be loaned to students free of charge]

M.G.L. c. 72, s. 8 [schools must keep records of daily attendance]

M.G.L. c. 76 [laws on school attendance; includes requirements for attendance and penalties for truancy; also includes prohibition of discrimination on account of race, color, sex, religion, or national origin]

Regulations For Entrance to First Grade and Kindergarten  
[adopted by the state Board of Education; establishes minimum age as 6] June 29, 1971.

Chapter 622 Regulations [adopted by the state Board of Education; prohibits discrimination by public schools on account of race, color, sex, religion,

or national origin; see Resource List]

## Other Rights

### Curriculum Innovation

M.G.L. c. 71, s. 13 [curriculum innovation in public high schools--Chapter 215]

### School Meals

Policy Statement for Determining Eligibility for Free and Reduced Price Meals and Free Milk (see Resource List)

## Grounds for Punishment

United States Constitution, Amendment 9, 10, 13 and 14

Coates v. Cincinnati, 402 U.S. 611 (1971) [vague and overbroad laws]

Riseman v. School Committee of Quincy, 439 F. 2d 148 (1st Cir. 1971) [vague and overbroad school rules]

M.G.L. c. 71, s. 37H [publishing and filing of school rules required--Chapter 467]

M.G.L. c. 71, s. 84-86 [purpose of rules; local option law]

## Forms of Punishment

Goss v. Lopez, 419 U.S. 565 (1975) [due process; suspension]

Mello v. School Committee of New Bedford, C.A. No. 72-1146F (D. Mass. 6 April 1972) [unpublished decision; due process; suspension; hearing procedures]

Tavano v. Crowell Equity No. 32699 (Mass. Superior Ct., Barnstable County, 31 August 1973) [permanent expulsion advisable only in most serious cases, school's duty to try alternatives]

Owens v. Devlin, C.A. No. 69-118-G (D. Mass. 28 February 1969, additional relief granted 6 March 1969) [unpublished decision; due process; suspension; disciplinary transfer]

M.G.L. c. 71, s. 37G [corporal punishment prohibited in public schools]

M.G.L. c. 76, s. 16 [remedies for illegal exclusion from school or from school courses, privileges, or other benefits]

Ladson v. Board of Education, 323 N.Y. S. 2d 545 (N.Y. Superior Ct. 1971) [exclusion from graduation ceremony]

In re Murphy, 11 Ed. Dept. Rep. 180 (N.Y. Ed. comm'r 1972) [exclusion from graduation ceremony]

In re Wilson, 11 Ed. Dept. Rep. 208 (N.Y. Ed. comm'r 1972) [exclusion from graduation ceremony]

## PART TWO IF YOUR RIGHTS ARE VIOLATED

United States Constitution, Amendments 9, 10, and 14.

42 U.S.C. 1983 (allows lawsuits for violations of constitutional or civil rights)

Wood v. Strickland, 420 U.S. 308 (1975) [students can sue and collect money damages from school officials who have violated their clear civil rights]



dent service centers are located in each of the department's  
ional centers except Pittsfield. (People in the Pittsfield  
a can contact the center in Springfield.) Staff in these  
ters can also be contacted for more information:

CENTRAL MASSACHUSETTS REGIONAL CENTER  
Beaman Street, Route 140  
West Boylston, Massachusetts 01583  
(617) 835-6267

GREATER BOSTON REGIONAL CENTER  
54 Rindge Avenue Extension  
Cambridge, Massachusetts 02140  
(617) 547-7472

NORTHEAST REGIONAL CENTER  
219 North Street  
North Reading, Massachusetts 01864  
(617) 727-0600

PITTSFIELD REGIONAL CENTER  
188 South Street  
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